LIBRARY BUREAU OF THE CENSUS



Census REF HD 9724 •U52x 1984 [v.2] no.22A

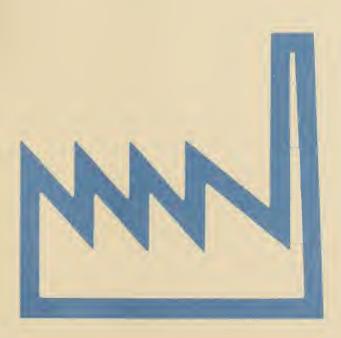
# 1982 Census of Manufactures

MC82-I-22A

INDUSTRY SERIES

## **Weaving Mills**

Industries 2211, 2221, 2231, and 2241



The publications from the 1982 Economic and Agriculture Censuses are dedicated to the memory of Shirley Kallek, Associate Director for Economic Fields. During her career at the Bureau of the Census (1955 to 1983), she continually directed efforts to improve the timeliness and accuracy of economic statistics.

# 1982 Census of Manufactures

MC82-I-22A

**INDUSTRY SERIES** 

## **Weaving Mills**

2211 Weaving	Mills	. Cotton
--------------	-------	----------

- 2221 Weaving Mills, Manmade Fiber and Silk
- 2231 Weaving and Finishing Mills, Wool
- 2241 Narrow Fabric Mills

Issued March 1985



U.S. Department of Commerce

Malcolm Baldrige, Secretary Clarence J. Brown, Deputy Secretary Sidney Jones, Under Secretary for Economic Affairs

BUREAU OF THE CENSUS

John G. Keane,

Director



## BUREAU OF THE CENSUS John G. Keane, Director C. L. Kincannon, Deputy Director

Charles A. Waite, Associate Director for Economic Fields John H. Berry, Assistant Director for Economic and Agriculture Censuses

INDUSTRY DIVISION

Gaylord E. Worden, Chief

ACKNOWLEDGMENTS—Meny persons perticipeted in the verious ectivities of the 1982 Census of Menufectures. Primary direction of the progrem was performed by Shirley Kailek, Associete Director for Economic Fields (until Mey 1983), Charles A. Walte, her successor, end Michael G. Farrell, Assistent Director for Economic end Agriculture Censuses (until August 1984), end John H. Berry, his successor.

This report wes prepered in the Industry Division under the general direction of Roger H. Bugenhagen, Chief (until April 1983), end Gaylord E. Worden, his successor. John P. Govoni, Assistent Chief for Census/Annuel Survey of Menufactures (ASM) Progrems, wes responsible for the overell menegement of the census of menufectures. He guided the plenning end implementation of the project end coordinated ectivities with other divisions.

Progrem responsibility wes shered by the following individuels who perticipated importantly in the entire progrem: John P. McNamee, Chief, Minerals Brench; Dale W. Gordon, Chief, Census/ASM Durables Brench; Michael J. Zampogna, Chief, Census/ASM Nondurebles Brench; Bernard J. Fitzpatrick, Chief, Census Speciel Reports Brench (until April 1983); end Bruce M. Goldhirsch, his successor; Kenneth I. Hansen, Chief, Annuel Survey of Menufectures Brench; Malcolm E. Bernhardt, Chief, Current Durebles Brench; end Carole A. Ambler, Chief, Current Nondurebles Brench.

Cherles T. Lee, Jr., Chief, Food, Tobacco, Textiles, Apparel, and Leather Section, assisted by Richard F. Going, Jr., was directly responsible for the analysis of the data and preparation of this report.

Dr. Edward A. Robinson, Senior Industry Stetisticien, mede significent contributions to the besic economic concepts end content of the census. The computer processing systems were developed end coordinated under the direction of William E. Norfolk, Assistent Chief for Operetions. Sarah A. Mathls, Chief, Census Progremming Brench, wes responsible for implementation of the computer systems, end the computer progrems were prepared under the supervision of David Onlons end Gerald S. Turnage, essisted by Berbara A. Lambert. The mathemetical techniques end quality control requirements were developed by Preston J. Walte, Assistent Chief for Research and Methodology, essisted by Stacey Cole, Pamela McKee, Amella M. Peregoy, Magdalena Ramos, end Ann M. Stephens.

Industry classification was controlled by Bruce M. Goldhirsch; coordination activities with Date Preparation Division were cerried out by Eric Taylor; and the verious phases of the publication process were coordinated by Lille Mae Skinner. Other persons made important contributions in such areas as developing specifications, procedures, and resolving problems. They include Richard J. Sterner, Robert A. Rosati, Richard Sweeney, Cyr F. Linonis, Leonard Pomeroy, Patricia L. Homing, and Dennis L. Wagner.

Systems end procedures for mailout, receipt, correspondence, dete input, industry clessification, other clerical processing, edministrative record

processing, end quelity control, elong with the essocieted electronic computer progrems, were developed in the Economic Surveys Division, W. Joel Richardson, Chief.

Planning, design, review, end composition of report forms were performed in the Administrative Services Division, Robert L. Kirkland, Chief.

Publication plenning, design, editorial review, composition, and printing procurement were performed in the Publications Services Division, Raymond J. Koski, Chief.

Geographic coding procedures and essociated computer programs were developed in the Geography Division, Robert W. Marx, Chief.

Meilout preperetion end receipt operations, clerical end enelytical review ectivities, dete keying, end geocoding review were performed in the Dete Preparetion Division, **Don L. Adams**, Chief.

Computer processing wes performed in the Computer Services Division, C. Thomas DiNenna, Chief (until Februery 1984), end John E. Halterman, his successor.

Photocomposition progrems for the stetistical tebles were developed in the Systems Support Division, Larry J. Patin, Chief (until October 1983), end Arnold E. Levin, his successor.

Special-purpose computer progrems for disclosure enelysis were developed in the Business Division, Gerald F. Cranford, Chief (until December 1983), end Howard N. Hamilton, his successor.

The overell plenning end review of the census operations were performed by the steff of the office of the Assistent Director for Economic and Agriculture Censuses.

Special ecknowledgment is also due the meny businesses whose cooperation has contributed to the publication of these date.

#### Library of Congress Cataloging in Publication Data

Census of manufectures (1982) 1982 census of manufactures.

Contents: [1] Geographic aree series — [2] Industry series.

Supt. of Docs. no.: C 3.24/8: MC82-I

United Stetes—Menufectures—Stetistics.

I. United States. Bureau of the Census. II. Title.

HD9724.C4 1984

338.4'767'0973

83-600153

For sale by Superintendent of Documents, U.S. Government Printing Office, Weshington, D.C. 20402.

### INTRODUCTION

#### **ECONOMIC CENSUSES OVER TIME**

The early beginnings of America's industrial output were first measured in the United States in the 1810 Decennial Census and again in 1820, when guestions on manufacturing were included with those for population. Beginning with the 1840 Decennial Census, there were enumerations of manufactures and mineral industries at 10-year intervals up to and including the year 1900 for manufactures and 1940 for mineral industries. The latter census was again taken for 1954, 1958, 1963, and

Because of the increasing dominance of manufacturing in the early 20th century, Congress directed that quinquennial censuses of manufactures be taken beginning in 1905. However, from 1919 through 1939, these censuses were conducted every 2 years. The need for war-related current surveys in the early 1940's postponed the next census of manufactures until 1948 (for 1947). That census was again taken for 1954, 1958, 1963, and 1967.

Retail and wholesale trade data were first collected in 1930, and in 1933 information on selected service industries was added to the data-collection operation. These business censuses, as they were called, were again taken for 1935, 1939 (as part of the 1940 decennial program), 1948, 1954, 1958, 1963, and 1967.

Information on construction industries was obtained first in 1930 and again for 1935 and 1939. Data for the full spectrum of construction industries were not gathered again until 1968 (for 1967).

The need for transportation data to supplement information available from existing governmental or private sources was recognized by Congress in the late 1950's and early 1960's. The census of transportation (consisting of several surveys) was taken first for 1963 and again for 1967.

Since 1967, all of the above censuses have been taken quinquennially as part of the Census Bureau's economic census program. (For the 1977 censuses, the coverage of the service industries was broadened from "selected services" to "all services, except religious organizations and private households." A total of 41 additional four-digit standard industrial classifications1 (SIC's) in 7 SIC major groups was added to the scope of the census. While most of the industries included for the first time for 1977 were covered again for 1982, some were not, i.e., hospitals; elementary and secondary schools; colleges, universities, and professional schools; junior colleges and technical institutes; labor unions and similar labor organizations; and political organizations.)

The first manufacturing census for an outlying area was conducted in Puerto Rico for the year 1909. Thereafter, with the exception of 1929, a census was taken at 10-year intervals through 1949. The first censuses of retail trade, wholesale trade, and selected service industries in Puerto Rico were conducted for 1939. These censuses also were taken for the years 1949, 1954, 1958, 1963, and 1967. A census of construction industries was introduced first in Puerto Rico for 1967. These censuses of Puerto Rico have been taken since then for the years 1972, 1977, and 1982.

Censuses of manufactures, retail trade, wholesale trade, and selected service industries were conducted in Guam and the Virgin Islands of the United States for 1958, 1963, 1967, 1972, 1977, and 1982. Censuses of mineral industries were taken in the Virgin Islands of the United States for the years 1958, 1963, and 1967 but not since that time. A census of construction industries was also undertaken in these areas for 1972, 1977, and 1982.

Retail trade, wholesale trade, selected service industries, manufacturing, and construction industries were canvassed for the first time in the Northern Mariana Islands in 1983 (for 1982).

For 1982, the economic censuses and agriculture censuses were conducted concurrently.

#### USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source for facts about the structure and functioning of the Nation's economy and provide essential information for government, business, industry, and the general public. They provide an important part of the framework for such composite measures as the gross national product, input-output measures, indexes of industrial production, and indexes measuring productivity and price levels. Information from the censuses is used to establish sampling frames and as benchmarks for current surveys of business activity, which are essential for measuring short-term economic conditions.

State and local governments use census data to assess business activities within their jurisdictions. The private sector uses the data to forecast general economic conditions; analyze sales performance; lay out sales territories; allocate funds for advertising; decide on locations for new plants, warehouses, or stores; and measure potential markets in terms of size, geographic areas, kinds of business, and kinds of products made or sold.

Following every census, thousands of businesses and other users purchase reports. Likewise, census facts are disseminated widely by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. All 1982 data are available on microfiche from the U.S. Government Printing Office and most data on computer tape from the Census Bureau. Finally, the more than 50 State Data Centers also are suppliers of economic census statistics.

#### AUTHORITY AND SCOPE OF THE ECONOMIC **CENSUSES**

The economic censuses are required by law under title 13 of the United States Code, sections 131, 191, and 224, which directs that they be taken at 5-year intervals for the years ending in 2 and 7. The 1982 Economic Censuses covered manufacturing, mining, construction industries, retail trade, wholesale trade, service industries, and selected transportation activities. Special programs also cover minority-owned and women-owned businesses. The next economic censuses are scheduled to be taken in 1988 for the year 1987.

<sup>&#</sup>x27;Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-00500176-0.

#### **CENSUS OF MANUFACTURES**

#### General

The 1982 Census of Manufactures is the 31st census of manufactures of the United States. For 1982, it was conducted jointly with the censuses of mineral industries, construction industries, retail and wholesale trades, service industries, selected transportation activities, and minority-owned and women-owned businesses.

This report, from the 1982 Census of Manufactures, is one of a series of 82 industry reports, each of which provides statistics for groups of related industries. Additional separate reports will be issued for each State and on special subjects, such as size of establishments, legal form of organization, and fuels and electric energy consumed.

These separate reports will subsequently be issued as portions of the final census volumes. Volume I, Subject Statistics, will show comparative statistics for industries, States, and standard metropolitan statistical areas. It also will show selected subjects, such as concentration ratios in manufacturing, selected materials consumed, manufacturing activity in government establishments, and water use in manufacturing. Volume II, Industry Statistics, will be a consolidation of reports for the 82 groups of industries showing the same information that is shown in this report, Volume III, Geographic Area Statistics, will contain establishment-based data (number of establishments, employment, payroll, value added by manufacture, and capital expenditures) for each State and its important standard metropolitan statistical areas, counties, and places, by industry groups and important individual industries. Totals for "all manufacturing" will be shown for counties and places with more than 450 manufacturing employees. The introduction to the final volumes will discuss, at greater length, many of the subjects described in this introduction. For example, the volume text will discuss the relationship of value added by manufacture to National income by industry of origin, the changes in statistical concepts over the history of the censuses, and the valuation problems arising from intracompany transfers between manufacturing plants of a company and between manufacturing plants and sales offices and sales branches of a company.

### Scope of Census and Definition of Manufacturing Industries

The 1982 Census of Manufactures covers all establishments employing one person or more primarily engaged in manufacturing as defined in the 1972 Standard Industrial Classification (SIC) Manual and its 1977 Supplement.¹ This is the system of industrial classification developed over a period of years by experts on classification in government and private industry under the guidance of the Office of Management and Budget. This system of classification is in general use among government agencies as well as organizations outside the government.

The SIC manual defines manufacturing as the mechanical or chemical transformation of inorganic or organic substances into new products. The assembly of component parts of products is also considered to be manufacturing if the resulting product is neither a structure nor other fixed improvement. These activities are usually carried on in plants, factories, or mills that characteristically use power-driven machines and materials handling equipment.

'Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-00500176-0. Manufacturing production is usually carried on for the wholesale market, for transfers to other plants of the same company, or to the order of industrial users rather than for direct sale to the household consumer. Some manufacturers in a few industries sell chiefly at retail to household consumers through the mail, through house-to-house routes, or through salespersons. Some activities of a service nature (enameling, engraving, etc.) are included in manufacturing when they are performed primarily for the trade. They are considered nonmanufacturing when they are performed primarily to the order of the household consumer.

### Relationship Between Annual Survey of Manufactures and Census of Manufactures

The Bureau of the Census conducts the annual survey of manufactures (ASM) in each of the 4 years between the censuses of manufactures. The ASM is based on a scientifically selected sample of approximately 55,000 establishments and collects the same industry statistics (employment, payroll, value of shipments, etc.) as the census of manufactures. In addition to collecting the information normally requested on the census form, the establishments in the ASM sample are requested to supply detailed information on assets, capital expenditures, retirements, depreciation, rental payments, supplemental labor costs, and costs of purchased services.

#### **Establishment Basis of Reporting**

The census of manufactures and the annual survey of manufactures are conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1982, as in earlier years, a minimum size limit was set for including establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries.

This report excludes information for separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company (see Auxiliaries).

#### Manufacturing Universe and Census Report Forms

The 1982 Census of Manufactures universe includes approximately 345,000 establishments. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures. The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in this publication are described below.

#### 1. Small Single-Unit Companies Not Sent a Report Form

In the 1982 Census of Manufactures, approximately 140,000 small single-establishment companies were excused from filing reports. Selection of these small

establishments was done on an industry-by-industry basis and was based on annual payroll and total shipments data as well as on the industry classification codes contained in the administrative records of other Federal agencies. The cutoffs were selected so that these administrative records cases would account for no more than 3 percent of the value of shipments for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed report forms.

Information on the physical location of the establishment, as well as information on payrolls, receipts (shipments), and industry classification, was obtained from the administrative records of other Federal agencies under special arrangements, which safeguarded their confidentiality. Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials were not distributed among specific products and materials for these establishments but were included in the product and material "not specified by kind" (n.s.k.) categories.

The industry classification codes included in the administrative records files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to the four-digit SIC level. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes these administrative record cases were given only a two- or three-digit SIC group. For the 1982 Census of Manufactures, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the four-digit SIC level. Establishments that did not return the classification form were coded later to those four-digit SIC industries identified as "not elsewhere classified" (n.e.c.) within the given two- or three-digit industry groups.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassifications have no significant effect on the statistics other than on the number of establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

#### 2. Establishments Sent a Report Form

The 205,000 establishments covered in the mail canvass were divided into three groups:

a. ASM sample establishments—This group consisted of approximately 55,000 establishments covering all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size (see appendix, Annual Survey of Manufactures).

In a census of manufactures year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll,

and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply information on assets, capital expenditures, retirements, depreciation, rental payments, supplemental labor costs, and costs of purchased services. Results of the ASM inquiries are included in tables 3c and 3d of this report.

The census part of the report form is one of approximately 200 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of this many forms to canvass the approximately 450 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries, as well as secondary products and miscellaneous services that establishments classified in these industries were likely to be performing. Respondents were requested to identify the products, the value of each product, and, in a large number of cases, the quantity of the product shipped during the survey year. Space was also provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry, which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant materials not identified on the form.

Finally, a wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

- b. Large and medium establishments (non-ASM) Approximately 100,000 establishments were included in this group. A variable cutoff, based on administrative records payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive one of the approximately 200 census of manufactures regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.
- c. Small single-unit establishments (non-ASM)—This group consisted of approximately 50,000 establishments. For those industries where application of the variable cutoff for administrative records cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or "short" form was used. These establishments received one of the approximately 80 versions of the short form, which requested summary product and material data and totals but no details on employment, payrolls, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics; the same

data were collected on the short as well as the long form. However, detailed information on materials consumed was not collected on the short form; thus its use would increase the values of the n.s.k. categories.

#### **Auxiliaries**

In this industry report, the data on employment and payroll are limited to operating manufacturing establishments. The census report form filed for auxiliaries (ES-9200) requested a description of the activity of the establishments serviced. However, the auxiliaries were coded only to the two-digit major group of the establishments they served; whereas, the operating establishments were coded to a four-digit manufacturing industry. Data for the approximately 10,000 separately operated auxiliaries are included in the paperbound geographic area series, the bound volumes of the census of manufactures, and in a report issued as part of the 1982 Enterprise Statistics survey.

Auxiliaries are establishments whose employees are primarily engaged in performing supporting services for other establishments of the same company, rather than for the general public or for other business firms. They can be at different locations from the establishments served or at the same location as one of those establishments but not operating as an integral part thereof and serving two or more establishments. Where auxiliary operations are conducted at the same location as the manufacturing operation and operate as an integral part thereof, they usually are included in the report for the operating manufacturing establishment.

Included in the broad category of auxiliaries are administrative offices. Employees in administrative offices are concerned with the general management of multiestablishment companies, i.e., with the general supervision and control of two units or more, such as manufacturing plants, mines, sales branches, or stores. The functions of these employees may include (1) program planning, including sales research and coordination of purchasing, production, and distribution; (2) company purchasing, including general contracts and purchasing methods; (3) company financial policy and accounting, tax accounting, company sales and profit reports, and personnel accounting; (4) general engineering, including design of product machinery and equipment, and direction of engineering effort conducted at the individual operation locations; (5) direction of company personnel matters; and (6) legal and patent matters.

Other types of auxiliaries serving the plants or central management of the company include purchasing offices, sales promotion offices, research and development organizations, etc.

#### **Industry Classification of Establishments**

Each of the establishments covered in the census was classified in one of approximately 450 manufacturing industries in accordance with the industry definitions in the SIC system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a closely related group of products. The product groupings from which industry classifications are derived are based on considerations such as similarity of manufacturing processes, types of materials used, types of customers, and the like. The resulting group of plants must be significant in terms of its number, value added by manufacture, value of shipments, and number of employees. The system operates in such a way that the definitions progressively became narrower with successive additions of numerical digits. There are 20 major groups (two-digit SIC), 143 industry groups (three-digit SIC), and approximately 450

industries (four-digit SIC). The product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. There are about 1,500 classes of products, identified by a five-digit code, and about 11,000 products, identified by a seven-digit code. The seven-digit products are considered the primary products of the industry with the same four digits.

Accordingly, an establishment is usually classified in a particular industry on the basis of its major activity during a particular year, i.e., production of the products primary to that industry exceeds, in value, production of the products primary to any other single industry. In a few instances, however, the industry classification of an establishment is not only determined by the products it makes but also by the process employed in making those products. For example, establishments engaged in blast furnace operations, refining of nonferrous metals from ore, or rolling and drawing of nonferrous metals (processes which involve heavy capitalization in specialized equipment) would be classified according to the process used during a census year. These establishments then would be "frozen" in that industry during the following ASM years.

In either a census or ASM year, establishments included in the ASM sample with certainty weight, other than those involved with heavily capitalized activities described above, are reclassified by industry only if the change in the primary activity from the prior year is significant or the change has occurred for two successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year (see appendix, Annual Survey of Manufactures). However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The result of these rules covering the switching of plants from one industry classification to another is that, at the aggregate level, some industries comprise different mixes of establishments between survey years, and establishment data for such industry statistics as employment and payroll may be tabulated in different industries between survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the four-digit SIC level, should be viewed with caution. This is true particularly for the comparison between the data shown for a census year versus the data shown for the previous ASM year.

As previously noted, the small establishments that may have been misclassified by industry are usually administrative-record cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of establishments.

While some establishments produce only the primary products of the industry in which they are classified, all establishments of an industry rarely specialize to this extent. The industry statistics (employment, inventories, value added by manufacture, total value of shipments including resales and miscellaneous receipts, etc.) shown in tables 1a through 5a, therefore, reflect not only the primary activities of the establishments in that industry but also their secondary activities. The product statistics in tables 6a through 6c represent the output of all establishments whether or not they are classified in the same industry as the product. For this reason, in relating the industry statistics, especially the value of shipments to the product statistics, the

composition of the industry's output shown in table 5b should be considered.

The extent to which industry and product statistics may be matched with each other is measured by two ratios, which are computed from the figures shown in table 5b. The first of these ratios, called the primary product specialization ratio, measures the proportion of product shipments (both primary and secondary) of the establishments classified in the industry represented by the primary products of those establishments. The second ratio, called the coverage ratio, is the proportion of primary products shipped by the establishments classified in the industry to total shipments of such products by all manufacturing establishments.

However, establishments making products falling into the same industry category may use a variety of processes and materials to produce them. Also, the same industry classification (based on end products) may include both establishments that are highly integrated and those that put only the finishing touches on an already highly fabricated item. For example, the refrigeration industry includes instances of almost complete integration (production of the compressor, condensing unit, electric motor, casting, stamping of the case, and final assembly) all carried on at one plant. On the other hand, the condensing unit, the motor, and the case may be purchased and only assembled into the finished product.

In some instances, separate industry categories have been established for integrated and nonintegrated establishments. For other industries, the census provides separate statistics on the production of intermediate commodities made and used in the producing plant. For some industries characterized by many plants of the same company, separate figures on interplant transfer of products usually are shown.

Differences in the integration of production processes, types of operations, and alternatives in types of materials used should be considered when relating the industry statistics (employment, payrolls, value added, etc.) to the product and material data.

### Value of Shipments for the Industry Compared With Value of Product Shipments

This industry report shows value of shipments data for industries and products. In tables 1a through 5a, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Product shipments shown in table 6a represent the total value of shipments of products classified as primary to an industry that were shipped by all manufacturing establishments regardless of their industry classification.

#### **CENSUS DISCLOSURE RULES**

In accordance with Federal law governing census reports, no data are published that would disclose the data for an individual establishment or company. However, the number of establishments classified in a specific industry is not considered a disclosure, so this item may be given even though other information is withheld.

The disclosure analysis for the industry statistics in tables 1a through 5a of this report is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line has been suppressed. However, the suppressed data are included in higher level totals. Additional disclosure analysis is performed for new capital expenditures that can be suppressed even though value of shipments data are publishable.

#### MICROFICHE AND COMPUTER TAPES

All the data in this report are available on microfiche. Selected data are also available on computer tape.

In addition to selected published data being on computer tape, one major data series, the location of manufacturing plants, will be available only on computer tape. This series presents the number of establishments by employment size class by four-digit SIC industry codes for States, counties, and places of 2,500 inhabitants or more. These data are available for both State and county by industry, and State and place by industry.

Microfiche reports are sold by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Computer tapes are sold by the Data User Services Division, Customer Services (Tapes), Bureau of the Census, Washington, D.C. 20233.

#### SPECIAL TABULATIONS

Special tabulations of data collected in the 1982 Census of Manufactures may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief, Industry Division, Bureau of the Census, Washington, D.C. 20233.

#### ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- Represents zero.
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (NC) Not comparable.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate or a consistency review.
- (X) Not applicable.
- (Z) Less than half the unit shown.
- n.e.c. Not elsewhere classified.
- n.s.k. Not specified by kind.
- pt. Part.
- r Revised.
- SIC Standard Industrial Classification.

Other abbreviations, such as lb, gal, yd, doz, bbl, and s tons, are used in the customary sense.

### **Users' Guide for Locating Statistics**

[For explanation of terms, see appendixes]

		Four-dig	git industry sta	atistics
	Item	Historical	Operating ratios	By geographic area
1	Number of companies	1a		
2	Number of manufacturing establishments	1a		2
	Employment and payroll:			
3	Number of employees	1a	1b	2
4	Payroll	1a	1b	2
5	Supplemental labor costs			
6	Production workers	1a	1b	2
7	Production-worker hours	1a	1b	2
8	Production-worker wages	1a	1b	2
	Shipments, cost of materials, and value added:			
9	Value of shipments (four-digit)	1a	1b	2
10	Product class shipments (five-digit)			
11	Product shipments (seven-digit)			
12	Value added by manufacture	1a	1b	2
13   14	Cost of materials	1a	1b	2
15	Fuels and electric energy			
	Inventories:	-		
16	Total, end of year	1a		
17	By method of valuation			
18	By stage of fabrication			
	Capital expenditures, assets, rental payments, and purchased services:			
19	New capital expenditures	1a		2
20	Used plant and equipment expenditures			
21	Gross assets			
22	Depreciation			
23	Retirements of buildings and machinery			
24	Rental payments			
	Turchased services			
	Ratios:			
26	Specialization	1a		
27	Coverage	1a		

<sup>\*</sup>Number of companies with shipments of over \$100 thousand.

<sup>\*\*</sup>Detailed information shown.

### in This Report by Table Number

Fou	ur-digit industry	y statistics – Con.		Five-digit	product class stati	and seven-digi	it product	
Summary and supplemental	By employ- ment size	By industry and product class specialization	Materials consumed by kind	Industry- product analysis	Product shipments	Product class by geographic area	Historical product class	
3a **3a	4	5а			*6a			1 2
3a 3a **3d **3a **3a 3a	4 4 4 4	5a 5a 5a 5a 5a						3 4 5 6 7 8
3a 3a **3a 3a, 3d	4 4 4	5a 5a 5a	7	5b, 5c 5b, 5c	6a 6a	6b	6c	9 10 11 12 13 14 15
3b, 3c 3b, 3c 3b	4							16 17 18
**3a, **3d **3a, **3d **3d **3d **3d **3d **3d	4	5a						19 20 21 22 23 24 25
3a 3a				5b 5b				26 27



### **Weaving Mills**

### CONTENTS

[Page numbers listed here omit the prefix that appears as part of the number of each page]

Users'	uction	Page III VIII 2
TABL	ES	
INDUS	STRY STATISTICS	
1a. 1b. 2. 3a. 3b. 3c. 3d. 4.	Historical Statistics for the Industry: 1982 and Earlier Years	6 7 9 10 10 11
	UCT STATISTICS	
6a-1. 6a-2.	Industry-Product Analysis—Other Industries With Shipments of Primary Products: 1982	15 17 18 28 34 36 37 38
MATE	RIAL STATISTICS	
7.	Materials Consumed by Kind: 1982 and 1977	39
APPE	NDIXES	
A. B.	Explanation of Terms	
Publica	ation Program	cover

# DESCRIPTION OF INDUSTRIES AND SUMMARY OF FINDINGS

#### **WEAVING MILLS**

This report shows 1982 Census of Manufactures statistics for establishments classified in each of the following industries:

#### SIC Code and Title

- 2211 Weaving Mills, Cotton
- 2221 Weaving Mills, Manmade Fiber and Silk
- 2231 Weaving and Finishing Mills, Wool
- 2241 Narrow Fabric Mills

The industry statistics (employment, payroll, cost of materials, value of shipments, inventories, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments but also their activities in the manufacture of secondary products as well as their miscellaneous activities (contract work on materials owned by others, repair work, etc.). This fact should be taken into account in comparing industry statistics (tables 1a-5a) with product statistics (table 6a-1) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5b, which shows the value of primary and secondary products shipped by establishments classified in the specified industry and the value of primary products of the industry shipped as secondary products by establishments classified in other industries.

Small single-unit companies with up to 20 employees (cutoff varied by industry) were excluded from the mail portion of the census. For these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated), data on payrolls and receipts were obtained from administrative records of other government agencies. The remaining statistics were developed from industry averages.

Establishment data were tabulated based on industry definitions contained in the 1972 Standard Industrial Classification (SIC) Manual and its 1977 supplement.<sup>1</sup>

#### **INDUSTRY 2211, WEAVING MILLS, COTTON**

This industry comprises establishments primarily engaged in weaving fabrics more than 12 inches in width, wholly or chiefly by weight of cotton. Establishments primarily engaged in weaving cotton carpets and rugs are classified in industry 2271, those tufting carpets and rugs in industry 2272, those making tire cord and fabric in industry 2296, and finishers of cotton broad woven fabrics in industry 2261.

In the 1982 Census of Manufactures, Industry 2211, Weaving Mills, Cotton, recorded employment of 76.9 thousand. The total

<sup>1</sup>Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

value of shipments for establishments classified in this industry was \$4.0 billion.

The value of shipments figure shown above is in current (1982) prices. All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

The employment figure shown above was 34 percent below the 117.2 thousand reported in 1977. The leading States in employment in 1982 were North Carolina, Georgia, South Carolina, and Alabama, accounting for approximately 89 percent of the industry's 1982 employment. These same States were the leaders in 1977, when they accounted for approximately 90 percent of the industry's employment.

Compared with 1981, employment decreased 24 percent. The 1981 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

Establishments in virtually all industries ship secondary products as well as products primary to the industry to which they are classified and have some miscellaneous receipts, such as resales and contract receipts. In current prices, industry 2211 shipped \$3.3 billion of products primary to the industry, \$644 million of secondary products, and had \$58 million of miscellaneous receipts. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in the industry was 84 percent (specialization ratio). In 1977, this specialization ratio also was 84 percent.

Establishments in this industry also accounted for 54 percent of products considered primary to the industry no matter where they actually were produced (coverage ratio). In 1977, the coverage ratio was 62 percent. The products primary to industry 2211, no matter in what industry they were produced, appear in table 6a-1 and aggregate to \$6.0 billion in current prices.

Certain products primary to industry 2211 are also primary to Industry 2361, Finishing Mills, Cotton; Industry 2392, House Furnishings, N.E.C.; and Industry 2399, Fabricated Textile Products, N.E.C. Table 6a-1 shows the data on a combined "wherever-made" basis to provide the product totals regardless of the industry classification of the establishment from which they were shipped. Table 6a-2 provides a breakdown of the products showing the industry in which the products are primary.

The total cost of materials and services used by establishments classified in the weaving mills, cotton, industry amounted to \$2.3 billion in current prices. Data on specific materials consumed appear in table 7.

Establishments of single-unit companies in this industry with up to 5 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 6 percent of total value of shipments.

### INDUSTRY 2221, WEAVING MILLS, MANMADE FIBER AND SILK

This industry comprises establishments primarily engaged in weaving fabrics more than 12 inches in width, wholly or chiefly by weight of silk and manmade fibers including glass. Establishments primarily engaged in weaving carpets and rugs from these fibers are classified in industry 2271, those tufting carpets and rugs from these fibers in industry 2272, those making tire cord and fabric in industry 2296, and finishers of manmade fiber and silk broad woven goods in industry 2262.

In the 1982 Census of Manufactures, Industry 2221, Weaving Mills, Manmade Fiber and Silk, recorded employment of 140.8 thousand. The total value of shipments for establishments classified in this industry was \$8.2 billion.

The value of shipments figure shown above is in current (1982) prices. All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

The employment figure shown above was 7 percent below the 151.0 thousand reported in 1977. The leading States in employment in 1982 were South Carolina, North Carolina, Virginia, and Georgia, accounting for approximately 81 percent of the industry's 1982 employment. These same States were the leaders in 1977, when they accounted for approximately 80 percent of the industry's employment.

Compared with 1981, employment decreased 1 percent. The 1981 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

Establishments in virtually all industries ship secondary products as well as products primary to the industry to which they are classified and have some miscellaneous receipts, such as resales and contract receipts. In current prices, industry 2221 shipped \$7.2 billion of products primary to the industry, \$928 million of secondary products, and had \$58 million of miscellaneous receipts. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in the industry was 89 percent (specialization ratio). In 1977, this specialization ratio was 86 percent.

Establishments in this industry also accounted for 62 percent of products considered primary to the industry no matter where they actually were produced (coverage ratio). In 1977, the coverage ratio was 63 percent. The products primary to industry 2221, no matter in what industry they were produced, appear in table 6a-1 and aggregate to \$11.6 billion in current prices.

Certain products primary to industry 2221 are also primary to Industry 2262, Finishing Mills, Manmade, and Industry 2392, House Furnishings, N.E.C. Table 6a-1 shows the data on a combined "wherever-made" basis to provide the product totals regardless of the industry classification of the establishment from which they were shipped. Table 6a-2 provides a breakdown of the products showing the industry in which the products are primary.

The total cost of materials and services used by establishments classified in the weaving mills, manmade fiber and silk, industry amounted to \$4.6 billion in current prices. Data on specific materials consumed appear in table 7.

Establishments of single-unit companies in this industry with up to 5 employees were excluded from the mail portion of the

census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 8 percent of total value of shipments.

### INDUSTRY 2231, WEAVING AND FINISHING MILLS, WOOL

This industry comprises establishments primarily engaged in weaving fabrics more than 12 inches in width, wholly or chiefly by weight of wool, mohair, or similar animal fibers; those dyeing and finishing all woven wool fabrics or dyeing wool, tops, or yarn; and those shrinking and sponging wool goods for the trade. Establishments primarily engaged in weaving wool carpets and rugs are classified in industry 2271, and those tufting wool carpets and rugs in industry 2272.

In the 1982 Census of Manufactures, Industry 2231, Weaving and Finishing Mills, Wool, recorded employment of 13.1 thousand. The total value of shipments for establishments classified in this industry was \$763 million.

The value of shipments figure shown above is in current (1982) prices. All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

The employment figure shown above was 10 percent below the 14.6 thousand reported in 1977. The leading States in employment in 1982 were Georgia, Maine, Massachusetts, and Pennsylvania, accounting for approximately 55 percent of the industry's 1982 employment. Data for Georgia and Pennsylvania have been withheld to avoid disclosing data for individual companies. This represents a shift from 1977 when Maine, Massachusetts, New Hampshire, and Georgia accounted for approximately 60 percent of the industry's employment.

Compared with 1981, employment decreased 9 percent. The 1981 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

Establishments in virtually all industries ship secondary products as well as products primary to the industry to which they are classified and have some miscellaneous receipts, such as resales and contract receipts. In current prices, industry 2231 shipped \$628 million of products primary to the industry, \$86 million of secondary products, and had \$49 million of miscellaneous receipts. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in the industry was 88 percent (specialization ratio). In 1977, this specialization ratio was 83 percent.

Establishments in this industry also accounted for 75 percent of products considered primary to the industry no matter where they actually were produced (coverage ratio). In 1977, the coverage ratio was 80 percent. The products primary to industry 2231, no matter in what industry they were produced, appear in table 6a-1 and aggregate to \$834 million in current prices.

Certain products primary to industry 2231 are also primary to Industry 2392, House Furnishings, N.E.C. Table 6a-1 shows the data on a combined "wherever-made" basis to provide the product totals regardless of the industry classification of the

establishment from which they were shipped. Table 6a-2 provides a breakdown of the products showing the industry in which the products are primary.

The total cost of materials and services used by establishments classified in the weaving and finishing mills, wool, industry amounted to \$394 million in current prices. Data on specific materials consumed appear in table 7.

Establishments of single-unit companies in this industry with up to 10 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 13 percent of total value of shipments.

#### **INDUSTRY 2241, NARROW FABRIC MILLS**

This industry comprises establishments primarily engaged in weaving or braiding fabrics 12 inches or narrower in width of cotton, wool, silk, and manmade fibers, including glass fibers. Establishments primarily engaged in producing fabric covered elastic yarn or thread are also included in this industry.

In the 1982 Census of Manufactures, Industry 2241, Narrow Fabric Mills, recorded employment of 17.5 thousand. The total value of shipments for establishments classified in this industry was \$852 million.

The value of shipments figure shown above is in current (1982) prices. All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

The employment figure shown above was 16 percent below the 20.8 thousand reported in 1977. The leading States in employment in 1982 were North Carolina, Rhode Island, Pennsylvania, and South Carolina, accounting for approximately 55 percent of the industry's 1982 employment. Data for North Carolina have been withheld to avoid disclosing data for individual companies. These same States were the leaders in 1977, when they accounted for approximately 55 percent of the industry's employment, although there has been some shift in the relative importance of individual States.

Establishments in virtually all industries ship secondary products as well as products primary to the industry to which they are classified and have some miscellaneous receipts, such as resales and contract receipts. In current prices, industry 2241 shipped \$798 million of products primary to the industry, \$41 million of secondary products, and had \$13 million of miscellaneous receipts. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in the industry was 95 percent (specialization ratio). In 1977, this specialization ratio was 96 percent.

Establishments in this industry also accounted for 97 percent of products considered primary to the industry no matter where they actually were produced (coverage ratio). In 1977, the coverage ratio also was 97 percent. The products primary to industry 2241, no matter in what industry they were produced, appear in table 6a-1 and aggregate to \$826 million in current prices.

The total cost of materials and services used by establishments classified in the narrow fabric mills industry amounted to \$388 million in current prices.

Establishments of single-unit companies in this industry with up to 5 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 10 percent of total value of shipments.

Table 1a. Historical Statistics for the Industry: 1982 and Earlier Years

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Excludes data for auxiliar	iaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes  All employees Production workers											Ba	tios		
Year <sup>1</sup>	Com- panies <sup>2</sup>	Total	With 20 employ- ees or more	Number	Payroll (million	Number	Hours	Wages (million	Value added by manufac- ture <sup>4</sup> (million	Cost of materials (million	Value of shipments (million	New capital expend- itures (million	End-of- year inven- tories <sup>4</sup> (million	Spe- cial- ization (per-	Cover- age (per-
	(no.)	(no.)	(no.)	(1,000)	dollars)	(1,000) INDU	(millions)	dollars)	dollars)	dollars)	dollars)	dollars)	dollars)	cent)	cent)
1982 Census	212	269	143	76.9	964.6	69.2	127.0	818.2	1 637.5	2 293.7	3 972.0	297.9	699.2	84	54
	(NA)	(NA)	(NA)	100.4	1 220.4	90.3	177.8	1 042.5	2 248.8	3 059.0	5 284.8	289.3	797.5	(NA)	(NA)
	(NA)	(NA)	(NA)	107.7	1 249.6	97.2	197.1	1 073.8	2 360.5	2 989.1	5 245.3	217.5	824.0	(NA)	(NA)
	(NA)	(NA)	(NA)	111.0	1 191.5	100.6	206.5	1 034.5	2 213.3	2 647.6	4 864.8	185.3	689.6	(NA)	(NA)
	(NA)	(NA)	(NA)	109.5	1 065.3	100.0	199.0	916.6	1 851.5	2 305.4	4 153.0	167.4	659.0	(NA)	(NA)
1977 Census	211	314	192	117.2	1 046.8	107.2	214.3	902.0	1 944.5	2 579.8	4 431.2	187.2	657.8	84	62
	(NA)	(NA)	(NA)	109.8	917.0	100.5	204.1	785.8	1 686.5	2 074.8	3 717.9	124.3	521.0	(NA)	(NA)
	(NA)	(NA)	(NA)	106.8	768.9	97.8	184.5	652.8	1 336.9	1 588.2	2 956.5	133.4	460.2	(NA)	(NA)
	(NA)	(NA)	(NA)	120.9	837.1	111.6	219.0	718.3	1 551.8	1 839.0	3 280.5	137.0	524.7	(NA)	(NA)
	(NA)	(NA)	(NA)	119.0	779.1	110.3	227.7	683.4	1 321.6	1 314.6	2 742.3	93.9	391.2	(NA)	(NA)
1972 Census	190	307	227	121.3	745.2	112.1	235.8	654.9	1 256.3	1 389.7	2 660.6	72.7	391.0	84	60
	(NA)	(NA)	(NA)	135.3	773.5	124.2	258.4	672.8	1 255.7	1 379.8	2 650.5	77.1	466.3	(NA)	(NA)
	(NA)	(NA)	(NA)	141.7	770.5	131.0	272.1	675.7	1 257.1	1 338.9	2 605.8	73.7	465.1	(NA)	(NA)
	(NA)	(NA)	(NA)	162.3	837.3	150.5	312.9	734.6	1 383.9	1 515.7	2 953.1	97.1	517.6	(NA)	(NA)
	(NA)	(NA)	(NA)	179.3	867.0	166.9	345.8	767.5	1 427.0	1 766.8	3 145.1	107.5	642.5	(NA)	(NA)
	218	393	331	202.8	938.4	189.3	398.0	831.5	1 624.0	1 759.1	3 327.7	171.5	646.5	(NA)	79
		INDUSTRY 2221, WEAVING MILLS, MANMADE FIBER AND SILK													
1982 Census	340	522	362	140.8	1 814.4	122.9	230.4	1 445.9	3 486.7	4 644.5	8 186.7	384.8	1 140.6	89	62
1981 ASM	(NA)	(NA)	(NA)	141.5	1 877.6	125.0	252.5	1 522.9	3 607.6	5 149.7	8 725.7	408.7	1 151.6	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	142.7	1 730.1	125.7	254.3	1 414.5	3 574.9	4 383.2	7 851.0	372.2	1 114.2	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	145.1	1 630.2	128.9	265.3	1 340.7	3 310.2	4 006.6	7 291.5	264.6	937.7	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	143.4	1 492.0	127.6	264.2	1 226.7	2 929.0	3 613.6	6 523.3	257.2	869.3	(NA)	(NA)
1977 Census	267	449	351	151.0	1 428.7	134.6	275.4	1 168.7	2 790.9	3 563.5	6 325.9	260.2	871.0	86	63
1976 ASM <sup>5</sup>	(NA)	(NA)	(NA)	161.1	1 397.8	144.0	296.0	1 161.0	2 600.0	3 345.9	5 869.1	245.6	845.8	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	151.7	1 149.7	135.2	261.4	935.5	1 964.8	2 670.2	4 632.0	192.2	766.5	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	157.8	1 165.3	141.2	286.8	964.7	2 192.3	2 668.6	4 776.8	203.2	727.7	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	161.4	1 129.2	145.4	310.6	948.2	2 030.0	2 326.6	4 368.7	188.5	641.4	(NA)	(NA)
1972 Census	256 (NA) (NA) (NA) (NA) 272	412 (NA) (NA) (NA) (NA) 396	341 (NA) (NA) (NA) (NA) 312	149.7 139.7 145.2 139.1 132.1 108.6	979.4 826.7 820.1 796.6 697.7 528.8	134.9 125.8 130.8 126.2 119.8 98.3	292.7 260.2 271.3 267.2 260.9 209.3	825.2 691.5 687.7 654.4 595.7 445.6	1 831.6 1 399.7 1 416.6 1 350.6 1 273.8 921.6	2 062.6 1 711.8 1 767.3 1 709.5 1 662.6 1 365.5	3 856.6 3 129.6 3 171.6 3 048.5 2 918.3 2 289.6	136.2 112.1 105.9 116.3 85.7 111.1	586.4 526.6 543.5 489.1 477.9 385.7	81 (NA) (NA) (NA) (NA)	74 (NA) (NA) (NA) (NA) 74
					IND	USTRY 2	231, WEA	VING AND	FINISHING	G MILLS, W	/00L				
1982 Census	116	131	71	13.1	175.8	11.3	22.8	136.5	349.4	394.2	762.8	27.7	150.6	88	75
1981 ASM	(NA)	(NA)	(NA)	14.4	189.7	12.3	24.8	141.6	437.9	429.1	844.2	18.2	180.9	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	14.5	172.6	12.4	24.3	130.2	369.2	337.7	698.5	22.5	156.3	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	15.4	166.9	13.2	27.0	127.1	344.9	330.0	662.6	21.8	135.6	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	15.4	156.2	13.0	26.9	116.6	317.8	317.5	626.1	17.4	117.6	(NA)	(NA)
1977 Census	154	165	84	14.6	136.6	12.6	25.9	105.8	312.9	283.7	583.3	14.9	111.0	83	80
1976 ASM	(NA)	(NA)	(NA)	15.5	133.6	13.1	26.9	98.5	264.6	313.9	571.6	41.7	94.2	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	14.3	112.1	11.6	22.2	82.1	198.1	251.3	454.1	610.9	85.2	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	17.3	130.4	14.5	29.1	98.4	246.1	292.9	530.6	616.9	108.8	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	18.4	133.5	15.7	32.5	99.8	248.6	244.2	484.7	10.1	102.6	(NA)	(NA)
1972 Census	178	198	119	19.4	132.1	16.5	34.7	99.0	239.4	217.1	450.1	11.6	90.7	84	83
1971 ASM	(NA)	(NA)	(NA)	25.0	156.9	20.7	41.7	117.1	226.1	296.1	546.8	31.5	100.3	(NA)	(NA)
1970 ASM	(NA)	(NA)	(NA)	32.9	191.0	27.8	57.2	148.2	328.5	446.8	784.9	25.2	127.6	(NA)	(NA)
1969 ASM	(NA)	(NA)	(NA)	37.2	207.3	32.7	67.4	163.4	375.3	548.4	924.7	19.7	147.6	(NA)	(NA)
1968 ASM	(NA)	(NA)	(NA)	39.1	214.6	34.3	73.2	170.8	432.6	636.6	1 070.7	29.4	166.3	(NA)	(NA)
1967 Census	262	310	217	41.8	216.3	36.6	76.0	170.4	428.6	657.1	1 090.0	28.0	177.2	(NA)	96
						INDU	STRY 22	41, NARRO	W FABRIC	MILLS					
1982 Census	241	281	161	17.5	215.5	15.2	28.5	158.9	464.7	388.3	851.8	22.3	137.2	95	97
1981 ASM	(NA)	(NA)	(NA)	21.1	245.2	18.1	35.4	181.3	478.4	481.2	941.5	625.9	155.0	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	20.7	224.5	17.8	34.6	165.4	426.1	398.8	824.7	622.0	129.9	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	21.3	209.2	18.7	36.6	162.3	397.3	390.2	787.4	629.9	127.3	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	20.4	191.8	17.8	35.6	147.3	360.4	345.1	701.4	25.5	108.0	(NA)	(NA)
1977 Census	291	335	182	20.8	171.6	18.1	35.7	130.9	350.8	333.9	682.9	16.2	109.3	96	97
1976 ASM	(NA)	(NA)	(NA)	20.1	159.7	17.2	34.0	119.9	322.3	332.5	646.6	11.3	109.7	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	19.2	140.2	16.0	31.1	102.1	259.0	272.2	540.4	12.1	100.3	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	23.9	159.9	20.6	39.9	120.5	331.6	314.1	606.9	16.4	113.2	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	26.8	165.0	23.2	46.3	126.9	308.9	299.0	609.0	24.3	106.4	(NA)	(NA)
1972 Census 1971 ASM 1970 ASM 1970 ASM 1968 ASM 1968 ASM 1967 Census	323 (NA) (NA) (NA) (NA) 345	376 (NA) (NA) (NA) (NA) (NA) 384	215 (NA) (NA) (NA) (NA) 220	27.1 25.6 27.3 28.5 27.9 26.2	162.3 146.3 147.4 143.6 137.0 121.1	23.5 21.8 23.2 25.3 25.0 23.3	47.3 44.1 46.3 50.6 51.2 46.7	120.9 108.4 110.5 112.8 109.6 96.3	289.0 284.9 261.8 269.4 257.4 214.4	276.8 247.5 254.1 283.9 264.7 233.7	566.2 531.2 513.7 553.9 514.2 445.1	11.2 10.4 16.0 19.0 15.7 15.7	94.6 91.5 87.3 87.9 86.3 70.0	93 (NA) (NA) (NA) (NA) (NA)	97 (NA) (NA) (NA) (NA) 96

#### Table 1a. Historical Statistics for the Industry: 1982 and Earlier Years-Con.

In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete canvass of all astablishments. ASM publication shows percentage standard errors. Unless otherwise noted, for data prior to 1967, see 1967 Census of Manufactures, vol. II, table 1 of the Industry

canyass of all astablishments. ASM publication shows percentage standard errors. Chapter.

2For the cansus, a company is defined as a business organization consisting of ona establishmant or more under common ownership or control.

3Includes establishments with payroll at any time during year.

4Effective with the 1982 Economic Censuses, uniform instructions for reporting inventories were introduced for all sector reports. Up to 1982, raspondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). In 1982, LIFO users ware asked to first report inventory values prior to the LIFO adjustment and then to raport the LIFO reserve and the LIFO value after adjustment for the reserve.

Because of this change in reporting instructions, tha 1982 data for invantorias and value added by manufacture included in the tables of this raport are not comparable to the prior-year data shown above and in historical census of manufactures and annual survey of manufactures publications. Inventories and value added data estimated on a basis comparable to the historical data, using the reported information for 1982, are shown below:

Industries	End-of-1981	End-of-1982	1982 value added by
	inventories	inventorias	manufacture
	(million dollars)	(million dollars)	(million dollars)
Industry 2211, Weaving mills, cottonIndustry 2221, Weaving mills, manmade fiber	665.3	466.9	1 533.2
and slik	1 206.4	1 049.5	3 466.3
	173.9	148.7	305.6
	131.8	129.2	465.3

See Inventorias in appendixes for axplanation of the difference between end-of-1981 inventory figure shown in table and corresponding figure shown in footnote.

Data either have associated standard errors axcaeding 15 percent or are not consistent with other census series and related data; thus, these estimates may be of limited reliability. Estimates for new capital expenditures has associated standard error of 15 percent or mora and may be of limited reliability. Estimates for other data items are of acceptabla reliability.

#### Table 1b. Selected Operating Ratios for the Industry: 1982 and Earlier Years

[For meaning of abbreviations and symbols, see introductory taxt. For explanation of terms, see appendixes]

Year   Payroll per employee (dollars)   Production workers as percent of employee (dollars)   Production workers as percent of employment (percent)   Production worker (number to the percent)   Pr	on production workers (dollars)	Cost of materials as percent of value of shipments (percent)	Cost of materials and payroll as percant of valua of shipmants	Value added	Payroll as percent of	Valua added							
1981 ASM     12 155     90     1 96       1980 ASM     11 603     90     2 02       1979 ASM     10 734     91     2 05       1978 ASM     9 729     91     1 99       1977 Census     8 332     91     1 99       1976 ASM     8 352     92     2 03       1974 ASM     6 924     92     1 96       1973 ASM     6 547     93     2 06       1972 Census     6 143     92     2 10       1971 ASM     5 717     92     2 08       1970 ASM     5 438     92     2 07       1969 ASM     5 159     93     2 07       1968 ASM     4 835     93     2 07       1967 Census     4 627     93     2 10	INDUCTOY OF		(percent)	per employee (dollars)	value added (percent)	per production worker hour (dollars)							
1981 ASM     12 155     90     1 96       1980 ASM     11 603     90     2 02       1979 ASM     10 734     91     2 05       1978 ASM     9 729     91     1 99       1977 Census     8 332     91     1 99       1976 ASM     8 352     92     2 03       1974 ASM     6 924     92     1 96       1973 ASM     6 547     93     2 06       1972 Census     6 143     92     2 10       1971 ASM     5 717     92     2 08       1970 ASM     5 438     92     2 07       1969 ASM     5 159     93     2 07       1968 ASM     4 835     93     2 07       1967 Census     4 627     93     2 10	INDUSTRY 221	11, WEAVING N	MILLS, COTTON										
1976 ASM     8 352     92     2 03       1975 ASM     7 199     92     1 88       1974 ASM     6 924     92     1 96       1973 ASM     6 547     93     2 06       1972 Census     6 143     92     2 10       1971 ASM     5 717     92     2 08       1970 ASM     5 438     92     2 07       1969 ASM     5 159     93     2 07       1968 ASM     4 835     93     2 07       1967 Census     4 627     93     2 10	28 5.45 5.01	58 58 57 54 56	82 81 81 79 81	21 294 22 398 21 917 19 940 16 909	59 54 53 54 58	12.89 12.65 11.98 10.72 9.30							
1971 ASM     5 717     92     2 08       1970 ASM     5 438     92     2 07       1969 ASM     5 159     93     2 07       1968 ASM     4 835     93     2 07       1967 Census     4 627     93     2 10	31 3.85 37 3.54 32 3.28	58 56 54 56 48	82 80 80 82 76	16 591 15 360 12 518 12 835 11 106	54 54 58 54 59	9.07 8.26 7.25 7.09 5.80							
INDUS	31 2.60 77 2.48 79 2.35 72 2.22	52 52 51 51 56 53	80 81 81 80 84 81	10 357 9 281 8 872 8 527 7 959 8 008	59 62 61 61 61 58	5.33 4.86 4.62 4.42 4.13 4.08							
	INDUSTRY 2221, WEAVING MILLS, MANMADE FIBER AND SILK												
1982 Census     12 886     87     1 87       1981 ASM     13 269     88     2 02       1980 ASM     12 124     88     2 05       1979 ASM     11 235     89     2 05       1978 ASM     10 404     89     2 07	20 6.03 23 5.56 58 5.05	57 59 56 55 55	79 81 78 77 78	24 763 25 495 25 052 22 813 20 425	52 52 48 49 51	15.13 14.28 14.06 12.48 11.09							
1977 Census     9 462     89     2 04       1976 ASM     8 677     89     2 05       1975 ASM     7 579     89     1 93       1974 ASM     7 385     89     2 03       1973 ASM     6 996     90     2 13	3.92 33 3.58 3.36	57 57 58 56 53	79 81 82 80 79	18 483 16 139 12 952 13 893 12 577	51 54 59 53 56	10.13 8.78 7.52 7.64 6.54							
1972 Census     6 542     90     2 17       1971 ASM     5 918     90     2 06       1970 ASM     5 648     90     2 07       1969 ASM     5 727     91     2 11       1968 ASM     5 282     91     2 17       1967 Census     4 869     91     2 12	58 2.66 74 2.53 17 2.45 78 2.28	53 55 56 56 56 57 60	79 81 82 82 81 83	12 235 10 019 9 756 9 710 9 643 8 486	53 59 58 59 55 55	6.26 5.38 5.22 5.05 4.88 4.40							
IND	OUSTRY 2231, WEA	AVING AND FIN	ISHING MILLS,	WOOL									
1982 Census 13 420 86 2 01 1981 ASM 13 174 85 2 01 1980 ASM 11 903 86 1 96 1979 ASM 10 1838 86 2 04 1978 ASM 10 143 84 2 06 See footnotes at end of table.	16 5.71	52 51 48 50	75 73	26 672 30 410	50 43 47	15.32 17.66							

Table 1b. Selected Operating Ratios for the Industry: 1982 and Earlier Years—Con.

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

[1 Of Theating of abbreviat	action and cympote,	occ maccacter, ten							
Year	Payroli per employee (dollars)	Production workers as percent of total employment (percent)	Annual hours of production workers (number)	Average hourly earnings of production workers (dollars)	Cost of materials as percent of value of shipments (percent)	Cost of materials and payroll as percent of value of shipments (percent)	Value added per employee (dollars)	Payroll as percent of value added (percent)	Value added per production worker hour (dollars)
			INDU	STRY 2231, WE	AVING AND FIN	NISHING MILLS,	WOOL-Con.		
1977 Census	9 356 8 619 7 839 7 538 7 255	86 85 81 84 85	2 056 2 053 1 914 2 007 2 070	4.08 3.66 3.70 3.38 3.07	49 55 55 55 50	72 78 80 80 78	21 432 17 071 13 853 14 225 13 511	44 50 57 53 54	12.08 9.84 8.92 8.46 7.65
1972 Census	6 809 6 276 5 805 5 573 5 488 5 175	85 83 84 88 88 88	2 103 2 014 2 058 2 061 2 134 2 077	2.85 2.81 2.59 2.42 2.33 2.24	48 54 57 59 59 60	78 83 81 82 79 80	12 340 9 044 9 985 10 089 11 064 10 254	55 69 58 55 50	6.90 5.42 5.74 5.57 5.91 5.64
				INDUSTRY 2	241, NARROW I	FABRIC MILLS			
1982 Census	12 314 11 621 10 845 9 822 9 402	87 86 86 88 87	1 875 1 956 1 944 1 957 2 000	5.58 5.12 4.78 4.43 4.14	46 51 48 50 49	71 77 76 76 77	26 554 22 673 20 585 18 653 17 667	46 51 53 53 53	16.31 13.51 12.32 10.86 10.12
1977 Census 1976 ASM 1975 ASM 1974 ASM 1973 ASM	8 250 7 945 7 302 6 690 6 157	87 86 83 86 87	1 972 1 977 1 944 1 937 1 996	3.67 3.53 3.28 3.02 2.74	49 51 50 52 49	74 76 76 78 76	16 865 16 035 13 490 13 874 11 526	49 50 54 48 53	9.83 9.48 8.33 8.31 6.67
1972 Census	5 989 5 715 5 399 5 039 4 910 4 622	87 85 85 89 90 89	2 013 2 023 1 996 2 000 2 048 2 004	2.56 2.46 2.39 2.23 2.14 2.06	49 47 49 51 51 53	78 74 78 77 78 80	10 664 11 129 9 590 9 453 9 226 8 183	56 51 56 53 53 53	6.11 6.46 5.65 5.32 5.03 4.59

Note: For qualifications of data, see footnotes on table 1a.

Table 2. Industry Statistics for Selected States: 1982 and 1977

[Excludes data for auxiliaries. Includes data for States with 150 employees or more. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

terminates and symbols, see initiation of terms, see appendixes														
							1982						1	977
		All establi	ishments <sup>2</sup>	All em	oloyees	Pro	duction wo	kers						
Industry and geographic area		Total (no.)	With 20 employ- ees or more (no.)	Number <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Value added by manufac- ture <sup>4</sup> (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	All employ- ees <sup>3</sup> (1,000)	Value added by manufac- ture (million dollars)
INDUSTRY 2211, WEAVING MILLS, COTTON												,		
United States	-	269	143	76.9	964.6	69.2	127.0	818.2	1 637.5	2 293.7	3 <b>972.0</b>	<b>297</b> .9	117.2	1 944.5
Alabama California Georgia Maine Mississippi	E2 - -	16 21 35 4 1	14 3 27 3 1	7.7 .2 17.1 CC CC	94.0 2.5 206.0 (D) (D)	6.9 .2 15.7 (D) (D)	12.9 .3 28.7 (D) (D)	81.3 1.9 176.1 (D) (D)	179.9 5.9 309.2 (D) (D)	192.0 6.4 540.9 (D) (D)	376.5 12.4 866.9 (D) (D)	37.8 .3 91.1 (D) (D)	15.1 .4 29.1 EE EE	204.4 6.7 517.4 (D) (D)
New Jersey New York North Carolina Pennsylvania South Carolina	E5 E9 E3	11 29 38 10 40	6 4 29 4 37	.5 .4 26.6 AA 16.8	7.1 5.4 325.6 (D) 219.6	.3 .4 23.7 (D) 15.4	.6 .8 42.5 (D) 27.9	5.4 4.7 279.4 (D) 185.5	14.9 8.7 539.1 (D) 350.8	15.6 11.4 831.2 (D) 471.4	31.3 20.3 1 384.6 (D) 821.2	1.2 .6 105.5 (D) (D)	CC CC 35.4 (NA) 25.6	(D) (D) 636.3 (NA) 377.8
Tennessee Texas Virginia	=	6 7 6	4 2 4	2.5 CC EE	34.9 (D) (D)	2.3 (D) (D)	4.7 (D) (D)	29.2 (D) (D)	61.0 (D) (D)	48.7 (D) (D)	110.4 (D) (D)	6.2 (D) (D)	EE 1.2 3.1	(D) 11.1 57.1

### Table 2. Industry Statistics for Selected States: 1982 and 1977—Con.

[Excludes data for auxiliaries. Includes data for States with 150 employees or more. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

All	Total (no.) 522	with 20 employ- ees or more (no.)	All emp Number <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million	Value added by manufac- ture <sup>4</sup> (million	Cost of materials	Value of shipments	New capital expend-	All employ-	Value added by manufac- ture
-	5 <b>22</b>	employ- ees or more (no.)		(million			(million	added by manufac- ture <sup>4</sup>	materials		capital expend-		added by manufac-
- - 9 -	15 2	-					dollars)	dollars)	(million dollars)	(million dollars)	(million dollars)	ees <sup>3</sup> (1,000)	(million dollars)
9	15 2	-											
9	2		140.8	1 814.4	122.9	230.4	1 445.9	3 486.7	4 644.5	8 186.7	384.8	15 <b>1.0</b>	2 790.9
	26 7 42	13 1 4 4 38	6.7 EE .3 .6 13.2	84.0 (D) 3.3 7.7 177.5	5.8 (D) .2 .5 11.1	11.1 (D) .5 .9 22.2	68.9 (D) 2.8 5.5 137.5	154.8 (D) 5.2 16.7 414.4	183.5 (D) 7.4 15.1 533.8	347.0 (D) 12.7 31.2 951.7	35.1 (D) .4 .6 50.0	5.9 (NA) .4 1.2 11.3	89.9 (NA) 6.4 21.0 264.8
500	8 19 4 2 4	6 14 1 2 3	1.8 3.4 CC BB .2	22.2 50.6 (D) (D) 2.3	1.4 2.7 (D) (D) .1	2.9 5.4 (D) (D) .3	16.0 37.2 (D) (D) 1.7	48.2 85.4 (D) (D) 3.2	31.7 129.3 (D) (D) 7.8	80.2 216.2 (D) (D) 11.0	4.5 8.7 (D) (D) .1	1.3 4.0 (NA) (NA) .6	23.8 70.8 (NA) (NA) 6.1
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	19 29 84 32 15	5 11 76 25 11	.5 1.4 34.6 4.0 .8	8.6 23.3 442.4 50.4 10.0	.4 .9 30.4 3.5 .7	.8 1.8 57.4 6.8 1.4	6.4 12.9 353.9 40.2 8.9	13.3 43.2 836.8 103.2 18.9	16.3 38.3 1 214.4 124.4 25.9	30.1 81.8 2 077.0 230.4 44.5	.8 5.5 72.4 4.6 2.4	.8 .8 40.6 4.5 .7	15.9 9.8 774.5 68.7 11.3
2 1 -	110 5 29 18 3	109 5 8 16 1	52.3 1.4 2.7 14.2 AA	654.7 20.0 34.8 189.2 (D)	46.9 1.2 2.3 12.4 (D)	84.8 2.0 4.4 23.7 (D)	537.0 15.2 28.6 148.6 (D)	1 277.4 41.2 59.2 282.0 (D)	1 660.7 64.0 76.6 451.0 (D)	2 946.8 109.2 135.7 735.5 (D)	114.1 3.9 9.4 (D) (D)	57.5 2.4 3.3 14.5 (NA)	1 035.8 47.3 58.2 268.4 (NA)
1	131	71	13.1	175.8	11.3	22.8	136.5	349.4	394.2	762.8	27.7	14.6	312.9
77-3	1 3 7 12 18	1 2 5 9 10	AA BB FF 2.1 1.7	(D) (D) (D) 28.3 23.5	(D) (D) (D) 1.8 1.5	(D) (D) (D) 3.7 2.9	(D) (D) (D) 22.3 17.0	(D) (D) (D) 64.8 55.0	(D) (D) (D) 53.8 34.9	(D) (D) (D) 120.7 90.4	(D) (D) (D) (D) 1.0	AA BB EE 3.1 2.2	(D) (D) (D) 58.4 45.2
7	4 6 13 3 4	2 5 3 1 4	AA 1.0 .3 AA AA	(D) 15.1 3.8 (D) (D)	(D) .9 .2 (D) (D)	(D) 1.8 .5 (D) (D)	(D) 12.0 2.9 (D) (D)	(D) 31.2 8.7 (D) (D)	(D) 25.6 8.9 (D) (D)	(D) 59.5 17.4 (D) (D)	(D) (D) (D) (D) (D)	AA 1.7 .9 AA BB	(D) 37,3 21,9 (D) (D)
-	9 9 4 4 2 1	6 6 3 2 2 1	EE EE .6 BB AA CC	(D) (D) 8.0 (D) (D) (D)	000,000	(D) (D) 1.3 (D) (D)	(D) (D) 7.6 (D) (D) (D)	(D) (D) 8.5 (D) (D) (D)	(D) (D) 11.6 (D) (D) (D)	(D) (D) 27.2 (D) (D) (D)	(D) (D) (D) (D) (D)	CC 1.0 .5 .3 BB BB	(D) 20.8 14.2 3.1 (D) (D)
-	97	52	11.0	149.0	9.3	18.9	115.0	305.4	363.9	688.0	27.0	12.8	285.3
-	1 6 12 16 2	1 5 9 9 2	AA FF 2.1 EE AA	(D) (D) 28.3 (D) (D)	(D) (D) 1.8 (D) (D)	(D) (D) 3.7 (D) (D)	(D) (D) 22.3 (D) (D)	(D) (D) 64.8 (D) (D)	(D) (D) 53.8 (D) (D)	(D) (D) 120.7 (D) (D)	(D) (D) (D) (D) (D)	AA EE 3.1 2.0 AA	(D) (D) 58.4 42.8 (D)
9	6 3 3 4 4 4 1	5 1 3 2 3 2 1	1.0 AA AA CC CC BB CC	15.1 (D) (D) (D) (D) (D) (D)	9 (D) (D) (D)	1.8 (D) (D) (D) (D) (D) (D)	12.0 (D) (D) (D) (D) (D) (D)	31.2 (D) (D) (D) (D) (D) (D)	25.6 (D) (D) (D) (D) (D) (D)	59.5 (D) (D) (D) (D) (D) (D)	(D) (D) (D) (D) (D) (D)	CC AA BB CC .9 .3 BB	(D) (D) (D) (D) 19.1 3.1 (D)
7	34	19	2.2	26.8	2.0	3.9	21.6	44.0	30.3	74.8	.7	1.7	23.3
9 1 2 2 9	2 2 4 5 2 2	1 1 1 4 2 2	AA CC AA BB CC AA	(D) (D) (D) (D) (D)	(D) (D) (D) (D) (D)	00000	(D) (D) (D) (D) (D)	(D) (D) (D) (D) (D)	000000000000000000000000000000000000000	(D) (D) (D) (D) (D)	000000000000000000000000000000000000000	(NA) .2 (NA) .3 (NA)	(NA) 2.4 (NA) 3.2 (NA) (NA)
00 21 22 - 21 7 - 3 - 7 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9		26 26 7 42 8 19 4 4 2 1 1 1 3 3 4 4 4 4 1 1 1 6 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	26	26	7 42 38 13.2 177.5  8 6 1.8 22.2  8 14 3.4 50.6  19 14 3.4 50.6  10 2 2 2 BB  11 1.4 23.3  2 2.3  2 19 5 5 5 8.6  2 29 11 1.4 23.3  2 25 4.0 50.4  2 32 25 4.0 50.4  2 15 11 8.8 10.0  110 109 52.3 654.7  2 29 8 27 34.8  1 1 1 AA (D)  1 1 1 1.7 23.5  2 1 1 1 1.7 23.5  3 1 1 AA (D)  4 2 AA (D)  5 1.0 15.1  13 3 1 AA (D)  6 5 1.0 15.1  13 3 3 3 3.8  3 4 4 AA (D)  6 5 1.0 15.1  7 7 9 6 EE (D)  8 8 (D)  9 6 EE (D)  9 6 EE (D)  9 7 52 11.0 149.0  1 1 1 CC (D)  1 1 1 CC (D)	7 42 38 13.2 177.5 11.1  8 6 6 1.8 22.2 1.4  7 4 1 2 38 50.6 2.7  8 19 14 3.4 50.6 2.7  9 11 1 4 3.4 50.6 2.7  1 2 2 8 8 (D) (D) (D)  2 2 2 8 8 (D) (D) (D)  2 2 3 84 76 34.6 442.4 30.4  3 2 25 4.0 50.4 3.5  1 10 109 52.3 654.7 46.9  2 9 8 2.7 34.8 2.3  1 10 109 52.3 654.7 46.9  2 9 8 2.7 34.8 2.3  1 18 16 14.2 189.2 12.4  3 1 AA (D) (D)  1 2 9 2.1 28.3 1.8  1 1 1 AA (D) (D)  1 2 9 2.1 28.3 1.8  1 1 1 AA (D) (D)  1 2 9 2.1 28.3 1.8  1 1 1 AA (D) (D)  1 2 9 2.1 28.3 1.8  1 1 1 AA (D) (D)  1 2 9 2.1 28.3 1.5  1 1 1 AA (D) (D)  1 2 9 2.1 28.3 1.5  2 2 2 AA (D) (D)  3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	7 42 38 13.2 177.5 1.5 9.9 22.2 1.4 2.9 8 6 1.9 14 3.4 50.6 2.7 5.4 0 2 2 BB CC (D)	7	- 42	1	1	1	17

#### Table 2. Industry Statistics for Selected States: 1982 and 1977-Con.

(Excludes data for auxiliaries. Includes data for States with 150 employees or more. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes

							1982						1	977
		All establi	ishments <sup>2</sup>	All em	ployees	Pro	duction wo	rkers						
Industry and geographic area	E۱	Total (no.)	With 20 employ- ees or more (no.)	Number <sup>3</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Value added by manufac- ture <sup>4</sup> (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	All employ- ees <sup>3</sup> (1,000)	Value added by manufac- ture (million dollars)
INDUSTRY 2241, NARROW FABRIC MILLS														
United States	E1	281	161	17.5	215.5	15.2	28.5	<b>15</b> 8.9	464.7	388.3	851.8	22.3	20.8	350.8
Alabama	E1 E4 E7	6 8 8 10 4	3 4 3 2 2	CC .2 AA .2 AA	(D) 2.0 (D) 1.7 (D)	(D) .2 (D) .1 (D)	(D) .4 (D) .3 (D)	(D) 1.4 (D) 1.4 (D)	(D) 4.5 (D) 3.0 (D)	(D) 2.6 (D) 2.9 (D)	(D) 7.1 (D) 5.9 (D)	(D) (D) (D) .1 (D)	CC .3 BB BB AA	(D) 4.3 (D) (D) (D)
Maryland Massachusetts New Hampshire New Jersey New York	E1 E4 E1	4 19 7 21 33	3 12 6 7 11	CC .8 .9 .5	(D) 11.1 11.8 8.6 15.8	(D) .7 .7 .5 .7	(D) 1.4 1.4 1.0 1.3	(D) 7.5 8.6 6.3 9.2	(D) 24.2 34.0 17.3 26.0	(D) 18.7 13.6 15.9 22.7	(D) 42.7 47.8 33.5 49.4	(D) 2.0 1.8 .6	BB 1.2 .8 .5 1.6	(D) 19.4 18.8 10.9 34.6
North Carolina Ohio Pennsylvania Rhode Island South Carolina Tennessee Virginia	E1 E1 	42 3 35 31 12 6 5	31 2 22 23 11 5 4	FF BB 2.0 2.6 1.6 .4	(D) (D) 25.6 33.6 18.3 4.3 9.2	(D) (D) 1.7 2.3 1.4 .4	(D) (D) 3.3 4.3 2.5 .7 1.2	(D) (D) 19.7 22.1 14.3 3.7 7.3	(D) (D) 48.7 60.4 41.8 11.6 15.5	(D) (D) 42.0 60.8 44.2 8.5 9.9	(D) (D) 89.7 121.8 87.0 20.3 26.0	(D) (D) 1.5 1.6 3.8 .1	FF .4 2.2 3.4 2.4 BB EE	(D) 8.5 32.2 49.5 40.4 (D) (D)

Note: For qualifications of data, see footnotes on table 1a.

1Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at time data were tabulated. The following symbols are shown for those States where estimated data based on administrative records data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

3 Statistics for some producing States have been withheld to avoid disclosing data for individual companies. However, for States with 150 employees or more, number of establishments is shown and employment size range is indicated by one of the following symbols: AA—150 to 249 employees; BB—250 to 499 employees; CC—500 to 999 employees; EE—1,000 to 2,499 employees; FF—2,500 employees or more.

4 Beginning in 1982, all respondents were requested to report their inventories at cost or market prior to adjustment to LIFO cost. This is a change from prior years in which respondents were permitted to value their inventories using any generally accepted accounting method. Consequently, data for inventories and value added by manufacture are not comparable to prior-year data.

#### Table 3a. Summary Statistics for the Industry: 1982

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item		Weaving mills,	Wea	wool		
NOTE:	Weaving mills, cotton (SIC 2211)	manmade fiber and silk (SIC 2221)	Total	Manufacturers (SIC 2231-11)	Commission mills (SIC 2231-51)	Narrow fabric mills (SIC 2241)
Companies¹number	212	340	116	(NA)	(NA)	241
All establishments²	269	522	131	97	34	281
	126	160	60	45	15	120
	38	86	36	23	13	108
	105	276	35	29	6	53
All employees: Average for year1,000_ Annual payroll <sup>3</sup> mil. dol	76.9	140.8	13.1	11.0	2.2	17.5
	964.6	1 814.4	175.8	149.0	26.8	21 <b>5</b> .5
Production workers:         1,000           Average for year         1,000           March         do           May         do           August         do           November         do	69.2	122.9	11.3	9.3	2.0	15.2
	71.0	128.2	12.4	10.4	2.0	15.4
	70.8	122.9	11.8	9.8	2.1	15.5
	68.3	121.4	10.4	8.6	1.9	15.1
	66.8	119.3	10.5	8.6	1.9	14.8
Hours	127.0	230.4	22.8	18.9	3.9	28.5
	32.4	60.2	6.2	5.3	1.0	7.4
	33.2	59.5	6.0	5.0	1.0	7.4
	29.2	54.1	5.1	4.2	.9	6.7
	32.1	56.5	5.4	4.4	1.0	7.0
Wagesmil. dol	818.2	1 445.9	136.5	115.0	21.6	158.9
Value added by manufacture <sup>4</sup> do	1 637.5	3 486.7	349.4	305.4	44.0	464.7
Cost of materials, etc. 5         do           Materials, parts, containers, etc., consumed         do           Resales         do           Fuels consumed <sup>6</sup> do           Purchased electric energy <sup>7</sup> do           Contract work         do	2 293.7	4 644.5	394.2	363.9	30.3	388.3
	1 967.3	4 136.6	312.6	288.9	23.8	358.7
	(D)	16.9	(D)	(D)	(D)	3.0
	54.6	76.8	15.4	12.3	3.1	8.4
	133.5	252.2	14.8	13.0	1.7	15.6
	(D)	162.0	(D)	(D)	(D)	2.5
Value of shipments, including resalesdo	3 972.0	8 186.7	762.8	688.0	74.8	851.8
Value of resalesdo	(D)	21.8	(D)	(D)	(D)	3.7

#### Table 3a. Summary Statistics for the Industry: 1982—Con.

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

		Weaving mills,	Wear			
ltem	Weaving mills, cotton (SIC 2211)	manmade fiber and silk (SIC 2221)	Total	Manufacturers (SIC 2231-11)	Commission mills (SIC 2231-51)	Narrow fabric mills (SIC 2241)
Manufacturers' inventories (see tables 3b and 3c)						
Capital expenditures for plant and equipment mil. dol  New capital expenditures	3 <b>0</b> 9.0 297.9 62.2 235.7 11.1	406.4 384.8 41.2 343.6 21.7	28.8 27.7 1.7 26.0 1.2	27.8 27.0 1.6 25.3	1.0 .7 .1 .7 .3	24.6 22.3 2.3 20.0 2.3
Primary product specialization ratio <sup>9</sup> percent Coverage ratio <sup>10</sup> do	84 54	89 62	88 75	(NA) (NA)	(NA) (NA)	95 97

#### Table 3b. Value of Inventories for the Industry: End of 1981 and 1982

[Million dollars. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

ltem	Weaving m (SIC 2		Weaving mills, and (SIC	silk	Weaving and wo (SIC	ool	Narrow fabric mills (SIC 2241)	
	End of 1981	End of 1982	End of 1981	End of 1982	End of 1981	End of 1982	End of 1981	End of 1982
Total Inventories <sup>1</sup>	764.9	699.2	1 277.4	1 140.6	176.4	<b>150</b> .6	140.1	137.2
Detail by method of valuation:  Subject to LIFO costing <sup>2</sup> LIFO reserve  LIFO value  Not subject to LIFO costing  Valuation method not reported <sup>3</sup> Amount subject to LIFO reported without associated reserve and value <sup>4</sup>	419.3 152.9 266.4 135.2 191.0	542.2 277.3 264.9 115.5 31.9	419.8 1 <b>0</b> 5.5 314.4 675.3 120.2	415.4 123.0 292.5 600.8 76.7	19.4 3.4 16.0 139.0 17.1	17.3 2.8 14.5 115.8 16.4	37.7 9.4 28.3 64.7 36.4	39.2 1 <b>0</b> .0 29.3 61.6 35.1
Detail by stage of fabrication: Finished goods Work in process	344.1 222.0 198.8	32 <b>0</b> .9 2 <b>0</b> 4.4 173.9	377.9 525.4 374.1	376.1 471.6 292.9	6 <b>0</b> .1 78.3 37.9	53.3 65.8 31.5	48.9 40. <b>0</b> 51.2	48.7 41.4 47.1

¹Effective with the 1982 Economic Censuses, uniform instructions for reporting inventories were introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (LIFO, FIFO, market, to name a few). In 1982, all respondents were requested to report inventories at cost or market. LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve. For further explanation, see inventories in appendixes. in appendixes.

2Only includes data reported by respondents who (a) indicated amount of inventories subject to LIFO cost, and (b) provided sufficient information to determine associated LIFO reserve

and value figures.

3Includes data estimated for nonresponse and nonmail administrative records and data reported by respondents who provided total inventory figures without other information.

4Includes data reported by respondents who indicated their inventories were subject to LIFO cost, but did not provide associated LIFO reserve and value figures.

#### Table 3c. Inventories by Specific Method of Valuation for the Industry: End of 1982

	Weaving m (SIC 2			manmade fiber silk 2221)	- wo	finishing mills, ool 2231)	Narrow fabric mills (SIC 2241)		
Item	Percent of total	Absolute standard error (percent)	Percent of total	Absolute standard error (percent)	Percent of total	Absolute standard error (percent)	Percent of total	Absolute standard error (percent)	
Total inventories	100.0	(X)	100.0	(X)	100.0	(X)	100.0	(X)	
Last-In, First-Out (LIFO) methods	77.5	(X)	36.4	(X)	11.5	(X)	28.6	(X)	
Non-LIFO methods	16.5	(X)	52.7	(X)	76.9	(X)	44.9	(X)	
Cost basis: First-In, First-Out (FIFO) Average cost	3.2 1.6 3.2 8.1 .4	(Z) (Z) (Z) .1 (S)	16.3 3.7 2.9 24.6 1.6	.9 .3 .1 .6 .2	22.8 8.2 1 <b>0</b> .8 12.4 15.2	.2 .6 .4 .2	23.2 (S) 9.7 9.3 (S)	3.3 (S) 2.8 2.2 (S)	
Market lower than cost Market always used	(Z) (Z)	(Z) (Z)	3.4 .2	.1 (Z)	.4 7.2	.1 .1	(Z) (Z)	(Z) (Z)	
Valuation method not reported Amount subject to LIFO reported without associated reserve	4.6	(X)	6.7	(X)	10.9	(X)	25.6	· (X)	
and value	1.4	(X)	4.2	(X)	.8	(X)	.9	(X)	

For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

Includes establishments with payroll at any time during year.

Data on supplemental labor costs are not included in annual payroll, but are shown in table 3d.

Value added by manufacture is computed using inventory data reported on a cost or market basis prior to any adjustment to LIFO cost. See table 3b, footnote 1 for further explanation.

Solat on purchased services for the repair of buildings and machinery and for communication services are not included in cost of materials, etc., but are shown in table 3d.

Data on purchased fuels by type were not collected for 1982. See MC82-S-4, Fuels and Electric Energy Consumed, for 1981 data on purchased fuels by type.

Toats on quantity of electric energy used for heat and power are included in table 3d.

Represents ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for establishments classified in industry.

Represents ratio of primary products shipped by establishments classified in industry to total shipments of such products by all manufacturing establishments, wherever classified.

#### Table 3c. Inventories by Specific Method of Valuation for the Industry: End of 1982—Con.

Note: The percentages shown for the LIFO and non-LIFO totals and the categories "valuation method not reported" and "amount subject to LIFO reported..." are based on the census universe estimates included in table 3b. The percentages shown for the specific non-LIFO methods of valuation (e.g., FIFO, etc.) are based on a representative sample of establishments included in the annual survey of manufactures (ASM) panel for 1982 (see appendixes for description of ASM). The absolute standard error of each of the ASM estimates is shown above.

#### Table 3d. Supplemental Industry Statistics Based on Sample Estimates: 1982

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

	Weaving m (SIC :	nills, cotton 2211)	and	manmade fiber silk 2221)	w	finishing mills, ool 2231)		abric mills 2241)
Item	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)						
Supplemental labor costs: Total	164.6	1	326.2	1	36.8	1	32,4	5
Legal costsVoluntary costs	82.2 82.4	1	163.1 163.1	1	18.2 18.6	1 2	18.2 14.2	6
Purchased services:								
Cost of purchased services for the repair of— Buildings and other structures	11.0	.1	28.3	3	1.1	.1	2.0	20
Response coverage ratio (percent) <sup>2</sup>	70.0 44.1	(X)	77.2 77.7	(X)	78.9 7.8	(X)	63.5 4.8	20 (X) 18 (X) 26 (X)
Response coverage ratio (percent) <sup>2</sup>	69.9	(x)	77.0	(X)	88.7	(X)	67.1	l (X)
Cost of purchased communication services	3.4	5	8.9	] 3	1.0	<u></u>	1.9	26
Response coverage ratio (percent) <sup>2</sup>	66.8	(X)	79.4	(X)	89.0	(X)	71.7	(X)
Electric energy used for heat and power: Purchased:								
Quantity (million kWh)	3 374.9	1	6 445.9	1 1	283.3	1	316.2	.3
Cost Generated less sold (million kWh)	133.5 140.5	(X) 1	252.2 41.9	(X)	14.8 1.2	(X)	15.6 .9	3 (X) 88
Gross book value of depreciable assets:								
Total:	2 135.9		4 366.8	3	259.0		232.8	6
Beginning of year New capital expenditures	296.4	1	369.1	2	26.0	2	15.3	18
New capital expendituresUsed capital expenditures	11.1	2	21.2	15	.8	2 3	2.0	18 42 31
RetirementsEnd of year	136.4 2 307.0	2	253.0 4 504.0	22	10.2 275.6	1 2	17.9 232.2	31
-113 07 your	2 007.0	·	1 301.0	_	2,0.0	_	202.2	Ĭ
Buildings and other structures:								
Beginning of year New capital expenditures	441.7 61.9	1	836.2 37.9	2 2	68.8	2 5	56.4 2.3	10 11
Used capital expenditures	21.9	22	1.0	1	1.5	1	2.3	11
Retirements	32.2	3	48.9	19	1.7	į į	2.4	33
End of year	471.6	1	826.2	2	68.8	2	56.5	9
Machinery and equipment:								
Beginning of year	1 694.2	1	3 530.6	3	190.1	2	176.4	7
New capital expenditures Automobiles, trucks, etc., for highway use	234.5	2	331.2	2 9	24.5	2	13.0	20 31
Computers and peripheral data processing	.4	•	1.1	9	.2	'	.4	31
equipment	4.0	1	4.2	2 2	.3	1	.2	30 27 18 45 32 7
All other New machinery and equipment, n.s.k.3	227.3 2.8	1 86	312.8 13.1	2 27	23.5	2 (S)	8.9 3.5	27
Used capital expenditures	10.9	2	20.2	16	.5	3	1.9	45
Retirements	104.2	2	204.1	23	8.5	1	15.6	32
End of year	1 835.4	1	3 677.8	2	206.7	2	175.7	7
Rental payments:								
Total	4.4	8	14.4	8	2.2	3	5.5	25
Buildings and other structures  Machinery and equipment	1.1 3.3	26 4	5.8 8.6	18 2	.7 1.5	8 1	3.3 2.2	25 29 32
Depreciation charges during 1982:								
Total	149.5	4	287.3	5	15.5	2	15.6	13
Buildings and other structuresMachinery and equipment	19.9 129.6	5	31.3 256.0	5 7 5	2.1 13.4	2 2	2.0 13.5	11 14
maximory and equipment	129.6	3	256.0	5	13.4	2	13.5	14

Note: Data for total new capital expenditures, new building expenditures, new machinery expenditures, and total used expenditures are also shown in table 3a. Data in table 3a are census universe totals and may differ from annual survey of manufactures (ASM) sample estimates shown in this table. Data in this table represent best estimates of year-to-year change as measured by the continuing ASM sample. However, they are subject to sampling error and, hence, as estimates of level, are not as reliable as universe figures shown in table 3a.

<sup>&</sup>lt;sup>1</sup>For description of relative standard error of estimate, see Qualifications of the Data in appendixes.

<sup>2</sup>Measure of extent to which respondents reported each item. Derived for each item by calculating the ratio of weighted employment for those sample establishments that reported the specific inquiry to weighted total employment for all sample establishments classified in industry. (See appendixes for explanation of sample weight.)

<sup>3</sup>Represents total machinery and equipment expenditures for establishments that did not break down their expenditures by specific type.

### Table 4. Industry Statistics by Employment Size of Establishment: 1982

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

[For meaning of abbreviations and symbols, see intro	ducto	ry text. Fo				duction wo						
		All estab-	All em	ployees	Pro	duction wo	rkers	Value added by manufac-	Cost of	Value of	New capital expend-	End-of- year inven-
Industry and employment size class	Ε¹	lish- ments (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	ture (million dollars)	materials (million dollars)	shipments (million dollars)	itures (million dollars)	tories (million dollars)
INDUSTRY 2211, WEAVING MILLS, COTTON												
Total	-	269	76.9	964.6	69.2	127.0	818.2	1 637.5	2 293.7	3 9 <b>72.0</b>	297.9	699. <b>2</b>
Establishments with an average of—	E9	75	.1	1.2	.1	.2	1.2	2.3	3.2	5.6	(D)	.9
1 to 4 employees 5 to 9 employees 10 to 19 employees	1 F-X	30 21 25	.2	2.8	.2	.4 .5	2.3	6.8 4.9	8.1 6.3	15.2 11.3	(0)	2.2
20 to 49 employees 50 to 99 employees 100 to 249 employees 250 to 499 employees	E4 E4 E1	13	.8 1.0	9.8 11.5	.6 .8	1.2 1.6	7.9 8.8	22.9 29.4	26.0 33.0	52.6 61. <b>7</b>	000000000000000000000000000000000000000	1.8 9.2 8.4
100 to 249 employees	E1 -	18 38 36	3.0 13.8	36.1 173.0	2.7 12.4 22.8	5.2 22.5	31.5 144.4	66.6 272.0	85.3 393.8	156.7 670.8	(D) (D)	17.4 102.7 233.4 323.3 (D)
500 to 999 employees 1,000 to 2,499 employees 2,500 employees or more	-	12	25.0 32.7 (D)	332.3 395.0 (D)	22.8 29.3 (D)	44.4 <u>51.0</u> (D)	285.5 334.2 (D)	610.4 622.2 (D)	766.0 <u>9<b>7</b>2.1</u> (D)	1 384.7 1 613.4 (D)	160.0 (D)	323.4 323.3 (D)
Covered by administrative records <sup>2</sup>		78	.5	5.3	.5	.9	4.6	9.2	13.5	23.0	1.2	4.4
INDUSTRY 2221, WEAVING MILLS,												
MANMADE FIBER AND SILK  Total	-	522	140.8	1 814.4	122.9	230.4	1 445.9	3 486.7	4 644.5	8 186.7	384.8	1 140.6
Establishments with an average of—	E9	90	.2	2.0	2	.3	1.9	4.8	5.5	10,4	.3	1.4
1 to 4 employees	E9 E8	40 30	.3 .4	3.1 5.9	.2 .2 .4	.5 .8	2.6 4.7	5.5 10.9	7.4 14.8	13.0 26.0	.3 .4 .7	1.8 1.8 3.6
20 to 49 employees50 to 99 employees	E3 E1	47 39	1.5 2.9	18.9 40.7	1.2 2.4	2.4 4.9	14.5 31.3	37.1 104.0	54.4 118.1	91.6 222.8	5.3 11.1	17.5 30.6
100 to 249 employees 250 to 499 employees	-	83 101	13.6 37.4	198.6 487.4	11.0 33.0	21.3 62.7	141.2 391.7	458.2 942.3	577.2 1 230.5	1 039.9 2 204.0	44.2 88.6	157.5 281.4
1,000 to 2,499 employees 2,500 employees or more	-	73 17 2	49.2 35.4 (D)	624.9 433.0 (D)	43.3 31.3 (D)	79.6 <u>58.0</u> (D)	503.6 354.3 (D)	1 187.3 <u>736.6</u> (D)	1 486.7 1 150.0 (D)	2 690.0 1 889.1 (D)	159.5 <u>74.7</u> (D)	334.0 312.8 (D)
Covered by administrative records <sup>2</sup>	E9	90	.5	5.9	.4	.9	5.1	10.6	15.9	26.8	.9	3.8
INDUSTRY 2231, WEAVING AND												
FINISHING MILLS, WOOL  Total	E1	131	13.1	175.8	11.3	22.8	136.5	349.5	394.2	762.8	27.7	<b>150</b> .6
Establishments with an average of—		00	(7)		(7)							
1 to 4 employees 5 to 9 employees 10 to 19 employees	E6 E7	26 18 16	(Z) .1 .2	.4 1.7 2.6	(Z) .1 .2	.1 .2 .4	1.2 1.9	1.2 7.7 5.9	.9 4.8 4.1	2.1 12.8 9.9	(Z) .2 .2 1.5	.5 2.9
20 to 49 employees50 to 99 employees	E2	23 13	.7 1.0	8.9 12.0	6	1.2 1.6	6.9 9.6	15.9 22.3	12.4 21.9	28.7 45.1	1.5	2.9 2.5 7.2 7.1 32.4 98.1 (D)
100 to 249 employees	-	17 12	2.6 8.4 (D)	39.8 110.4	.9 2.2 7.3 (D)	4.6 14.7 (D)	29.9 86.7 (D)	96.3 200.2	69.5 <u>280.6</u>	1 <b>7</b> 5.6 488.6	6.1 19.5	32.4 98.1
500 to 999 employees  Covered by administrative records <sup>2</sup>		6 22	(D) .1	(D)	(D) .1	(D)	(D)	(D) 3.1	(D) 3.2	(D) 6.5	(D)	(D) 1.8
Industry 2231-11, Manufacturers' Own				1.0			1.0	0.1	5.2	0.5	.,	1.0
Wool Total		07	44.0	440.0		40.0	445.0	005.4				
Establishments with an average of—	-	97	11.0	149.0	9.3	18.9	115.0	305.4	363.9	688. <b>0</b>	27.0	139.8
1 to 4 employees 5 to 9 employees	E6	21 15	(Z) .1	.3 1.5	(Z) .1	(Z) .2	.3 1.0	.9 7.3	.8 4.7	1.7 12.2	(Z) .2 .2	.5 2.7
10 to 19 employees 20 to 49 employees	E2	9 15	.1 .5	1.5 6.2	.1 .4	.2 .8	1.0 5.0	3.6 11.8	3.4 11.1	7.0 23.3	1.5	1.7 6.5
50 to 99 employees 100 to 249 employees 250 to 499 employees	E2 - -	8 13 10	.6 2.1 <u>7.6</u> (D)	6.9 32.1 <u>100.5</u>	.5 1.7	1.0 3.6	5.9 23.9	14.0 81.5	17.5 56.2	32.5 147.1	5.7	5.5 28.1
500 to 999 employees		6		(D)	6.5 (D)	13.1 (D)	77.8 (D)	186.3 (D)	270.2 (D)	464.2 (D)	19.2 (D)	94.9 (D)
Covered by administrative records <sup>2</sup>	E9	22	.1	1.3	.1	.2	1.0	3.1	3.2	6.5	.1	1.8
Industry 2231-51, Jobbers, Commission Weaving												
Total	E7	34	2.2	<b>2</b> 6.8	2.0	3. <b>9</b>	21.6	44.0	3 <b>0</b> .3	74.8	.7	<b>10</b> .9
Establishments with an average of— 1 to 4 employees———————————————————————————————————	E8 F9	5	(Z) (Z) .1	.1 .2	(Z)	(Z) (Z) .2	.1 .2	.3	.1	.4	( <u>Z</u> )	.1
10 to 19 employees	E7	3 7 8	.1	1.1 2.8	.1	.2	.2 .8 1.9	.4 2.3 4.1	.1 .7	.5 2.9 5.4	( <u>Z)</u> (D) (Z) (Z) .1	.8 7
100 to 249 employees	F5	8 5 4	.4 1.4 (D)	5.1 17.6 (D)	(Z) (Z) .1 .2 .3 <u>1.3</u> (D)	.4 .7 <u>2.6</u> (D)	3.7 14.9	8.3 28.7 (D)	1.3 4.3 <u>23.7</u> (D)	12.6 52.9 (D)		.2 .8 .7 1.6 <u>7.5</u> (D)
250 to 499 employeesINDUSTRY 2241, NARROW FABRIC MILLS	-	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Total	E1	281	17.5	215.5	15.2	28.5	158.9	464.7	388.3	851.8	<b>22.</b> 3	137.2
Establishments with an average of— 1 to 4 employees	E9	50	.1	1.2	.1	2	1.1	0.0	0.7	5.4		10
5 to 9 employees	E7	52 27 41	.2 .6	2.4 6.8	.2	.2 .3 .9	1.1 1.9 5.0	2.6 5.9 13.6	2.7 6.8 12.5	5.4 12.8 26.3	.1 .2 .5	1.0 2.3 5.0
50 to 99 employees	E2	57 51	1.8 3.7	22.2 44.3	.2 .5 1.5 3.3 5.8 2.3	.9 2.9 6.3	15.6 34.8	49.0 90.6	41.5 70.5	90.4 159.8	1.9 3.8	11.5 21.2
100 to 249 employees 250 to 499 employees 500 to 999 employees	1 -	41 9 3	6.5 2.9 1.8	78.5 39.4 20.7	5.8 2.3 1.5	11.0 4.3	60.0 25.1 15.4	164.4 61.6	159.6 65.0	324.3 127.3	8.5 3.7	. 50.1 26.4 19.7
Covered by administrative records <sup>2</sup>	1	59	1.8	20.7	1.5	2.6	15.4 2.3	77.0 6.0	29.8	105.5	3.6	19.7 2.4
	1				.5		2.3	0.0	0.1	12.3	.2	

#### Table 4. Industry Statistics by Employment Size of Establishment: 1982—Con.

Note: For qualifications of data, see footnotes on table 1a. Data shown as a (D) are included in underscored figures above.

Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at time data were tabulated. The following symbols are shown for those States where estimated data based on administrative records data account for 10 percent or more of figures shown: E1-10 to 19 percent; E2-20 to 29 percent; E3-30 to 39 percent; E4-40 to 49 percent; E5-50 to 59 percent; E6-60 to 69 percent; E7-70 to 79 percent; E8-80 to 89 percent; E9-90 percent or more.

\*\*Report forms were not mailed to small single-unit companies with up to 20 employees (cutoff varied by industry). Payroll and sales data for 1982 were obtained from administrative records supplied by other agencies of the Federal Government. Those data were then used in conjunction with industry averages to estimate the items shown. Data are also included in respective size

#### Table 5a. Industry Statistics by Industry and Primary Product Class Specialization: 1982

[Table presents selected statistics for establishments according to their degree of specialization in products primary to their industry. Measures of plant specialization shown are (1) industry specialization: ratio of primary product shipments to total product shipments (primary plus secondary, excluding miscellaneous receipts) for the establishment; and (2) product class specialization: ratio of largest primary product class shipments to total product shipments (primary plus secondary, excluding miscellaneous receipts) for the establishment. See appendix for method of computing ratios. Statistics for establishments with specialization ratios of less than 75 percent are included in total lines but are not shown as a separate class. In addition, data may not be shown for various reasons; e.g., to avoid disclosing data for individual companies. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes.]

Indus-			All em	ployees	Pr	oduction work	kers	Value			New
try or prod- uct class code	Industry or product class by percent of specialization	All estab- lish- ments (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	added by manufac- ture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	capital expend- itures (million dollars)
2211	Weaving mills, cotton: Entire industry Establishments with 75 percent specialization or more	269 232	76.9 49.1	964.6 626.8	69.2 44.5	127.0 81.9	818.2 528.5	1 637.5 1 068.8	2 293.7 1 506.9	3 972.0 2 619.2	297.9 (D)
22111	Cotton duck and allied fabrics: Establishments with this product class primary Establishments with 75 percent specialization or more in	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
22112	class  Cotton sheeting and allied fabrics: Establishments with this product class primary  Establishments with 75 percent specialization or more in	19	8.5	97.6	7.7	13.5	(D) 84.9	(D) 154.1	182.5	(D) 329.2	(D) 14.7
22113	class	11	7.1	93.8	6.6	12.8	15.5 82.4	160.7	143.5	302.6	3.6 14.6
22114	class  Cotton colored yarn fabrics, toweling and dishcloth fabrics, and napped cotton fabrics, including blanketing:  Establishments with this product class primary	27	17.9	53.6	3.9	29.3	47,8 189.0	100.6 352.8	79.5 661.3	1 040.8	9.3
22115	Establishments with 75 percent specialization or more in class	21	14.1	176.0	12.8	23.2	149.6	288.2	487.8	799.5	122.3
22116	Establishments with this product class primary Establishments with 75 percent specialization or more in class	3 2	(D) (D)	(D) (D)	(D) (D)	(D) (D)	(D) (D)	(D) (D)	(D)	(D) (D)	(D) (D)
22116	Other broad woven cotton fabrics and specialties: Establishments with this product class primary Establishments with 75 percent specialization or more in class	20 15	6.2 3.8	82.2 47.7	5.6 3.4	11.3 6.4	71.1 40.7	106.0 60.5	236.4 153.5	353.7 223.3	28.6 25.4
22117	Finished cotton broad woven fabrics, finished in weaving mills:  Establishments with this product class primary  Establishments with 75 percent specialization or more in	20	11.2	148.0	10.1	18.3	123.2	331.3	384.7	728.9	(D)
22119	Cotton towels and washcloths (made in weaving mills):	13	7.6	99.0	6.9	11.7	82.6	205.1	254.0	471.4	(D)
2211A	Establishments with this product class primary	6 3	19.2 (D)	228.9 (D)	17.1 (D)	30.1 (D)	193.7 (D)	384.5 (D)	523.9 (D)	904.7 (D)	27.7 (D)
	mills):  Establishments with this product class primary  Establishments with 75 percent specialization or more in class	4 2	1.1 (D)	14.6 (D)	.7 (D)	1.6 (D)	9.4 (D)	25.5 (D)	21.3 (D)	47.2 (D)	1.1 (D)
2221	Weaving mills, manmade fiber and silk: Entire industry Establishments with 75 percent specialization or more	522 458	140.8 105.0	1 814.4 1 342.0	122.9 91.8	230.4 171.3	1 445.9 1 068.0	3 486.7 2 753.9	4 644.5 3 488.1	8 186.7 6 272.2	384.8 301.9
22211	100 percent filament rayon and/or acetate fabrics: Establishments with this product class primary Establishments with 75 percent specialization or more in class	21 16	3.8 2.0	54.4 30.9	3.2 1.7	6.8	41.2 24.2	108.7 71.6	155.7 115.6	265.9 189.9	20.1 (D)
22212	100 percent filament fabrics, except rayon, acetate: Establishments with this product class primary Establishments with 75 percent specialization or more in	57	20.3	272.1	16.8	32.8	201.3	599.8	900.8	1 510.1	83.4
22213	class 100 percent spun rayon and/or acetate fabrics, including blends (gray goods): Establishments with this product class primary	44 5	14.6	205.0	.8	23.3	148.7	462.2 22.6	668.6	1 136.2 54.5	70.7 (D)
22214	Establishments with 75 percent specialization or more in class	2 87	(D) 50.1	(D)	(D) 45.3	(D)	(D)	(D)	(D)	(D)	(D)
22215	Establishments with 75 percent specialization or more in class  All other 100 percent spun noncellulosic fabrics:	62	32.9	618.1 401.8	29.9	80.3 52.0	517.7 338.1	1 114.5 733.9	1 263.4 796.0	2 394.6 1 537.9	116.6 72.9
	Establishments with this product class primary Establishments with 75 percent specialization or more in class	35 23	14.1 7.7	184.0 95.8	12.3 6.9	23.5 12.6	148.1 76.6	312.8 149.9	474.7 166.8	793.9 321.1	27.6 11.8
22216	Combinations of filament and spun yarn fabrics, chiefly manmade fibers:  Establishments with this product class primary  Establishments with 75 percent specialization or more in class	26 i	9.3 2.6	114.1 31.2	8.3 2.2	14.7 3.9	92.8 23.3	242.6	365.7 87.0	618.1 178.5	15.8 3.9
	Ulado	12 1	2.6	31.2	2.2	3.9	23.3	89.8	87.0	178.5	3.9

## Table 5a. Industry Statistics by Industry and Primary Product Class Specialization: 1982—Con.

[Table presents selected statistics for establishments according to their degree of specialization in products primary to their industry. Measures of plant specialization shown are (1) industry specialization: ratio of primary product shipments to total product shipments (primary plus secondary, excluding miscellaneous receipts) for the establishment; and (2) product class specialization: ratio of largest primary product class shipments to total product shipments (primary plus secondary, excluding miscellaneous receipts) for the establishment. See appendix for method of computing ratios. Statistics for establishments with specialization ratios of less than 75 percent are included in total lines but are not shown as a separate class. In addition, data may not be shown for various reasons; e.g., to avoid disclosing data for individual companies. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes.]

Indus-	reasons, e.g., to avoid disclosing data to individual compan			ployees		oduction work		Value			New
try or prod-	Industry or product class by percent of specialization	All estab-						added by manufac-	Cost of	Value of	capital expend-
class	modely of product stage by percent of specialization	lish- ments	Number	Payroll (million	Number	Hours	Wages (million	(million	materials (million	shipments (million	itures (million
code		(number)	(1,000)	dollars)	(1,000)	(millions)	dollars)	doilars)	dollars)	dollars)	dollars)
2221 22217	Weaving mills, manmade fiber and slik — Con. Blanketing, silk, paper, and other specialty manmade fiber fabrics:										
	Establishments with this product class primary Establishments with 75 percent specialization or more in	32	7.5	108.2	6.1	12.4	75.8	227.7	237.9	467.3	33.5
	class	22	5.1	78.3	4.0	8.3	54.5	170.2	183.9	355.7	29.1
22218	Finished manmade fiber and silk broad woven fabrics, finished in weaving mills:										
	Establishments with this product class primary Establishments with 75 percent specialization or more in	37	21.9	296.5	18.9	37.3	233.4	499.8	622.2	1 126.4	67.0
	class	23	7.3	100.6	6.4	13.3	81.7	227.4	298.6	525.7	28.9
22219	Manmade fibers and silk sheets and pillowcases, made in weaving mills:		(5)	(5)	(5)						
	Establishments with this product class primary Establishments with 75 percent specialization or more in	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	class		_	-	_		_	_	-	_	_
2221A	Other fabricated manmade fiber and silk textile products, made in weaving mills (towels, washcloths, etc.):  Establishments with this product class primary	9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establishments with 75 percent specialization or more in class	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2231	Weaving and finishing mills, wool:		` .	` '	``	`,	ì		(-,	(-)	(-/
	Entire industry Establishments with 75 percent specialization or more	131 111	13.1 10.1	175.8 134.3	11.3 8.7	22.8 17.6	136.5 105.4	349.4 289.2	394.2 311.6	762.8 621.8	27.7 17.0
22311	Finished wool yarn, tops or raw stock, not combed or										
	spun at same establishment: Establishments with this product class primary	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Establishments with 75 percent specialization or more in class	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
22312	Wool fabrics (gray goods):										
	Establishments with this product class primary Establishments with 75 percent specialization or more in	13 12	1.0	12.8	.8	1.7	10.0	28.5	27.8	58.2	1.4
00040	class	12	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
22313	Finished wool apparel fabrics:  Establishments with this product class primary  Establishments with 75 percent specialization or more in	27	8.3	111.2	7.2	14.6	88.3	213.9	299.1	522.3	19.8
	class	21	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
22314	Finished wool nonapparel fabrics and felts: Establishments with this product class primary	8	1.2	20.1	.9	1.8	12.8	50.8	24.0	75.2	5.0
	Establishments with 75 percent specialization or more in class	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
22315	Receipts for commission finishing or sponging of wool										
	fabrics: Establishments with this product class primary	8	.2	3.7	.2	.5	3.4	2.0	8.6	17.7	(D)
	Establishments with 75 percent specialization or more in class	8	.2	3.7	.2	.5	3.4	2.0	8.6	17.7	(D)
22319	Wool or chiefly wool woven blankets (made in weaving										
	mill):  Establishments with this product class primary  Establishments with 75 percent specialization or more in	14	.6	8.5	.5	1.0	6.1	15.6	8.7	24.7	.1
	class	13	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
2241	Narrow fabric mills: Entire industry	281	17.5	215.5	15.2	28.5	158.9	464.7	388.3	851.8	22.3
	Establishments with 75 percent specialization or more	281 262	15.4	188.5	13.6	25.6	141.3	420.6	350.9	768.9	20.1
22411	Woven narrow fabrics: Establishments with this product class primary	108	11.1	146.7	9.6	18.1	106.7	328.9	251.3	579.5	17.6
	Establishments with 75 percent specialization or more in class	99	10.2	134.3	8.8	16.5	97.5	304.8	228.9	532.3	15.6
22414	Braided narrow fabrics:										
	Establishments with this product class primary Establishments with 75 percent specialization or more in class	41	3.6	39.2	3.1	5.6	28.5	76.4	64.2	141.3	2.2
22415	class	35	2.6	29.8	2.3	4.1	21.1	55.6	43.2	99.2	1.7
22415	Covered rubber thread: Establishments with this product class pnmary Establishments with 75 percent specialization or more in	20	1.3	14.8	1.2	2.2	12.1	31.8	51.6	82.9	1.2
	class	20	1.3	14.8	1.2	2.2	12.1	31.8	51.6	82.9	1.2

Note: For qualifications of data, see footnotes on table 1a.

# Table 5b. Industry-Product Analysis – Value of Shipments and Primary Product Shipments, Specialization and Coverage Ratios for the Industry: 1982 and Earlier Census Years

[An establishment is assigned to an industry based on shipment values of products representing largest amount considered primary to an industry. Frequently, establishment shipments comprise mixtures of products assigned to an industry (primary), those considered primary to other industries (secondary), and receipts for activities such as merchandising or contract work. Columns A-D show this product pattern for an industry, and column E shows primary product specialization ratio. The extent to which an industry's primary products are shipped by establishments classified in and out of an industry is shown in columns F-H and coverage ratio is shown in column I. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

			Valu	ue of shipmer	nts		Value of primary product shipments			
Industry and product group code	Industry and census year	Total (million dollars)	Primary products (million dollars)	Secondary products (million dollars)	Miscel- laneous receipts (million dollars)	Primary product special- ization ratio Col. B÷ Col. B+C (percent)	Total made in all indus- tries (million dollars)	Made in this industry (million dollars)	Made in other indus- tries (million dollars)	Coverage ratio Col. B ÷ Col. F (percent)
		А	В	С	D	E	F	G	Н	
2211	Weaving mills, cotton1982	3 972.0 4 431.2 2 660.6	3 270.0 3 710.7 2 207.7	643.7 686.0 417.2	58.4 34.5 35.7	84 84 84	16 045.1 15 964.9 13 673.2	3 270.0 3 710.7 2 207.7	12 775.1 12 254.2 11 465.5	54 62 60
2221	Weaving mills, manmade fiber and silk19821977 1977	8 186.7 6 325.9 3 856.9	7 201.1 5 360.0 3 064.7	927.9 903.1 739.0	57.7 62.9 52.8	89 86 81	<sup>2</sup> 11 566.7 <sup>2</sup> 8 454.5 <sup>2</sup> 4 114.5	7 201.1 5 360.0 3 064.7	<sup>2</sup> 4 365.6 <sup>2</sup> 3 094.5 <sup>2</sup> 1 049.8	62 63 74
2231	Weaving and finishing mills, wool1982	762.8 583.3 450.1	628.4 467.3 364.5	85.8 94.9 68.4	48.6 21.1 17.2	88 83 84	834.0 581.3 440.7	628.4 467.3 364.5	205.5 114.0 76.2	75 80 83
2241	Narrow fabric mills 1982 1977 1972	851.8 682.9 566.2	798.0 628.9 505.9	40.5 26.7 36.2	13.3 27.3 24.1	95 96 93	826.1 645.0 521.5	798.0 628.8 505.9	28.1 16.2 15.6	97 97 97

Figure includes shipments of cotton woven fabric finished from purchased fabric (primary products of industry 2261) and shipments of household furnishings made from purchased fabric (primary products of industry 2392), as well as shipments of cotton woven fabric end household furnishings woven and finished in the same establishment.

Figure includes shipments of manmade woven fabric finished from purchased fabric (primary products of industry 2262), end shipments of household furnishings made from purchased fabric (primary product of industry 2392), as well as shipments of manmade woven fabric and household furnishings woven and finished in the same establishment.

#### Table 5c-1. Industry-Product Analysis—Shipments by Product Class and Industry: 1982

[Million dollars. Table shows where products of an industry (referred to as primary and listed in table 6a) are made and what products are made by establishments classified in an industry. Read down an industry column to find what products are produced in an industry. Only those product groups that have at least \$2 million in shipments from establishments classified in one of industries included in this chapter are shown. Read across to determine where products of industries in this chapter are produced. To extent that some of primary products are made in industries not included in this chapter, value of such shipments is shown in "Other industries" column. Specified "Other industries" are listed in table 5c-2 if they account for more than \$5 million of products primary to this chapter. For meaning of abbreviations and symbols, see explanatory text. For explanation of terms, see appendixes]

1982 product code	Product group, product class, and miscellaneous receipts	All industries	Weaving mills, cotton (SIC 2211)	Weaving mills, manmade fiber and silk (SIC 2221)	Weaving and finishing mills, wool (SIC 2231)	Narrow fabric mills (SIC 2241)	Other industries
,	Total Primary products	(X) (X) (X) (X)	3 9 <b>72</b> .0 3 <b>270.0</b> 643.7 58.4	8 186.7 7 201.1 927.9 57.7	<b>7</b> 62.8 6 <b>2</b> 8.4 85.8 48.6	851.8 798.0 40.5 13.3	(X) (X) (X) (X)
2211- 22111 22112 22113 22114	Cotton broad woven fabrics Cotton duck and allied fabrics Cotton sheeting and allied fabrics Cotton print cloth yarn fabrics. Cotton colored yarn fabrics, toweling and dishcloth fabrics, and napped cotton fabrics, including blanketing	16 0 <b>45.1</b> 88.2 290.0 296.2	3 270.0 (D) (D) (D)	(D) 9.1 30.9 48.5	(D) - - -	-	12 441.2 (D) (D) (D)
22115 22116 22117 22119 2211A 22110	Fine cotton goods (gray goods). Other broad woven cotton fabrics and specialties. Finished cotton broad woven fabrics, finished in weaving mills Cotton towels and washcloths (made in weaving mills). Other fabricated cotton textile products (made in weaving mills). Cotton broad woven fabrics and fabricated products, n.s.k.	79.6 385.6 21 161.0 3964.0 41 717.7 136.2	(D) 321.1 614.6 (D) 79.7 135.1	30.3 (D) 100.0	(D) (D) - -		(D) 2446.4 (D) (D)
2221- 22211 22212 22213 22214	Weaving mills, manmade fiber and silk	<sup>5</sup> 11 566.7 280.5 1 448.7 80.6 2 309.7	(D) (D) 10.6 (D) (D)	7 201.1 270.4 1 346.1 79.4 2 151.6	(D) - - - (D)	-	<sup>5</sup> 3 9 <b>24.7</b> (D) 92.0 (D) (D)
22215 22216 22217	All other 100 percent spun noncellulosic fabrics Combinations of filament and spun yarn fabrics, chiefly manmade fibers Blanketing, silk, paper, and other specialty manmade fiber fabrics	650.6 614.7 435.5	(D) (D) (D)	625.5 589.3 422.0	(D) . -	-	(D) (D) (O)
22218 22219	Finished manmade fiber and silk broad woven fabrics, finished in weaving mills	<sup>6</sup> 2 933.4	114.1	957.7	(D)	-	(D)
2221A	mills Other fabricated manmade fiber and silk textile products, made in weaving mills (towels, washcloths, etc.)	71 156.3 81 315.5	(D) (D)	337.9 80.7	- (D)	-	(D) <sup>8</sup> 1 230.0
22210 <b>22</b> 31-	Manmade fiber and silk broad woven fabrics and fabricated products, n.s.k	341.2 83 <b>4.0</b>	(D)	340.4 (D)	- 628.4	-	(D) (D)
22311	Finished wool yarn, tops or raw stock, not combed or spun at same establishment	(D)	_	(D)	(D)	-	(D)
22312 22313 22314	Wool fabrics (gray goods) Finished wool apparel fabrics Finished wool nonapparel fabrics and felts	137.8 501.4 68.7	(D) - -	(D) (D) (D)	(D) (D) (D)	-	(D) (D) (D)
22315 22319 22310	Receipts for commission finishing or sponging of wool fabrics	(D) 24.5 44.3	Ē	(D) (D)	(D) (D) (D)	-	(D) (D)

#### Table 5c-1. Industry-Product Analysis—Shipments by Product Class and Industry: 1982—Con.

[Million dollars. Table shows where products of an industry (referred to as primary and listed in table 6a) are made and what products are made by establishments classified in an industry. Read down an industry column to find whet products are produced in an industry. Only those product groups that have at least \$2 million in shipments from establishments classified in one of industries included in this chapter are shown. Read across to determine where products of industries in this chapter are produced. To extent that some of primary products are made in industries not included in this chapter, value of such shipments is shown in "Other industries" column. Specified "Other industries" are listed in table 5c-2 if they account for more than \$5 million of products primary to this chapter. For meaning of abbreviations and symbols, see explanatory text. For explanation of terms, see appendixes]

		•					
1982 product code	Product group, product class, and miscellaneous receipts	All industries	Weaving mills, cotton (SIC 2211)	Weaving mills, manmade fiber and silk (SIC 2221)	Weaving and finishing mills, wool (SIC 2231)	Narrow fabric mills (SIC 2241)	Other industries
2241- 22411 22414 22415 22410	Nerrow fabrics mille	8 <b>26.1</b> 568.2 135.7 86.8 35.4	( <b>D</b> ) (D) -	= = = = = = = = = = = = = = = = = = = =	-	798.0 (D) 129.0 86.8 (D)	(D) (D) (D) (D)
	OTHER SHIPMENTS BY FOUR-DIGIT PRODUCT GROUP						
2257- 2258- 2261- 2262- 2279-	Circular knit fabric mills	XX XX XX XX XX XX	(D) (D) (D)	30.6 (D) (D) 17.4	(D) - (D)	12.7 13.7 - -	(X) (X) (X) (X) (X) (X)
2281- 2282- 2283- 2291- 2296-	Yarn mills, except wool	(X) (X) (X) (X) (X)	135.3 (D) - (D)	278.6 (D) (D) (D)	(D) - 29.7 (D)	(D) (D) - - -	\$
2297- 2299- 2311- 2329- 2399-	Nonwoven fabrics Textile goods, n.e.c Men's and boys' suits and coats Men's and boys' clothing, n.e.c Fabricated textile products, n.e.c.	(X) (X) (X) (X) (X)	(D) - - (D)	(D) (D) - -	(D) (D) (D)	(D) - - (D)	××××××××××××××××××××××××××××××××××××××
2824- 3079- 3496- 3842-	Organic fibers, noncellulosic	XX XX XX XX	- - (D)	(D) (D)	=======================================	(D)  -	(X) (X) (X)
	MISCELLANEOUS RECEIPTS						
93000 00 99980 00	Receipts for work done for others on their materials Miscellaneous receipts, including receipts for repair work, sales of scrap and refuse, etc.	(X) (X)	(D) 6.6	25.2 10.7	24.6 (D)	8.0	(X)
99989 00	Sales of products bought and resold without further manufacture, processing, or assembly at establishment	(X)	(D)	21.8	(D)	3.7	(X)

<sup>&#</sup>x27;Figure includes shipments of cotton woven fabric finished from purchased fabric (primery products of industry 2392), as well as shipmants of cotton woven fabric end household furnishings wovan and finished in the same establishment.

Figure includes \$436 million of shipments of cotton woven fabric finished in finishing plants (primery products of product class 22617).

Figure includes \$356 million of shipments of towels end weshcloths mede from purchesed febric (primery products of product class 23923).

Figure includes \$1.1 billion of shipments of other febricated cotton textured products mede from purchesed fabric (primery products of product class 23924), and \$469 million of shipments of other fabricated textile products woven and finished in manmade waving mills (primery products of product class 221A).

Figure includes shipments of manmade woven fabric finished from purchesed fabric (primary products of industry 2392), as well as shipments of manmade woven febric and household furnishings woven end finished in the same establishments.

Figure includes \$1.8 billion of shipments of sheets and pillowceses mede from purchased febrics (primery product class 22628).

Figure includes \$678 million of shipments of sheets and pillowceses mede from purchased febrics (primery products of product class 23922).

Figure includes \$621 million of shipments of other fabricated menmede fiber end silk textile products mede from purchased fabrics (primary products of product class 23923), and \$608 million of shipments of other fabricated menmede fiber end silk textile products woven end finished (primery products of product class 22119).

## Table 5c-2. Industry-Product Analysis—Other Industries With Shipments of Primary Products: 1982

[Million dollars. Table is a continuation of table 5c-1 and shows where products of industries in this chapter (referred to as primary products and listed in table 6a) are made. To extent that some of primary products are made in industries not included in this chapter, value of such shipments is shown in "Other industries" column of table 5c-1. Specified "Other industries" are listed in this table if they account for more than \$5 million of products primary to this chapter. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1982 product code	Other industries	Value	1982 product code	Other industries	Value
2211-	COTTON BROAD WOVEN FABRICS		2221-	WEAVING MILLS, MANMADE FIBER AND SILK—Con.	
	2262 Finishing plants, manmade	(D) 15.3		2296 Tire cord and fabric	(D) (D)
2221-	WEAVING MILLS, MANMADE FIBER AND SILK		2231-	WOOL BROAD WOVEN FABRICS	
	2057 Circular kait fatata milla	(D)		2262 Finishing plants, manmade	(D)
	2257 Circular knit fabric mills	(D) (D) (D)	2241-	NARROW FABRICS MILLS  2269 Finishing plants, n.e.c.	(D)

## Table 6a-1. Product and Product Classes—Quantity and Value of Shipments by All Part A. Industries 2211, 2221, and 2231

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

- Inpinioriti	s in appendix. For meaning or abbreviations and symbols, see introductory tex	1982										
1982 product code	Product	Number of companies with shipments	Quantity of	Total shipmer interplant t	its, including ransfers <sup>1</sup>	Transfers establishi the same	ments in	Quantity produced and				
		\$100,000 or more	production for all purposes	Quantity <sup>2</sup>	Value (million dollars)	Quantity	Value (million dollars)	consumed in the same establishment				
	COTTON BROAD WOVEN FABRICS											
2211 22219 2221A pt												
22617 — 23921 pt 23922 — 23923 — 23924 pt	Total	(NA)	(X)	(X)	6 045.1	(X)	(X)	(X)				
23990 26	Made in weaving mills Chiefly cotton Chiefly manmade fiber Made from purchased fabrics	(NA) (NA) (NA)	8888	(X) (X) (X) (X)	4 103.5 3 635.1 468.4	(X) (X) (X) (X) (X)	888	(X) (X) (X) (X) (X)				
	Gray goods; finished goods; and selected fabricated products: Gray goods:	(NA)	(x)	(X)	1 941.6	(X)	(X)	(X)				
22111 — 22111 00	Cotton duck and allied fabrics: Cotton duck and allied fabrics, including combed duck mil sq yd	17	82.7	74.3	88.2	(D)	(D)	(D)				
22112 22112 00	Cotton sheeting and allied fabrics: Cotton sheeting and allied coarse and medium yarn fabrics do	26	518.7	421.9	290.0	62.3	51.1	97.4				
22113 — 22113 00	Cotton print cloth yarn fabrics: Cotton print cloth yarn fabrics do	17	1 466.7	1 457.3	296.2	(D)	(D)	14.3				
22114 —	Cotton colored yarn fabrics, toweling and dishcloth fabrics, and napped cotton fabrics, including blanketing	(NA)	(X)	(X)	926.6	(X)	(X)	(X)				
22114 10 22114 30 22114 50 22114 00	blanketing Carded colored yarn fabrics mil sq yd Toweling, washcloth, and dishcloth fabrics do Blanketing and other napped fabrics do Cotton colored yarn fabrics, toweling, and dishcloth fabrics, and napped cotton fabrics, n.s.k.	10 5 9 (NA)	(X) (D) 462.3 65.5	440.1 185.4 55.5 (X)	617.5 231.0 56.8 21.3	(X) 103.2 132.0 (D)	128.ó 166.3 (D)	192.5 275.8 (D)				
22115 22115 00	Fine cotton goods: Fine cotton fabrics mil sq yd	10	(D)	81.0	79.6	14.6	10.0	78.5				
22116 22116 00 22117	Other broad woven cotton fabrics and specialties: Other broad woven cotton fabrics and specialties	30	348.0	294.7	385.6	144.7	177.7	67.6				
22617 22117 11 22617 11	Finished cotton broad woven fabricsml fin lin yd  Bleached and white finisheddo	(NA) (NA)	<sup>3</sup> 1 827.1	<sup>3</sup> 1 006.0 402.7	1 161.0 222.8	(X) (X)	(X) (X)	<sup>3</sup> 871.5				
22117 31 22617 31	Plain dyed and finished do	(NA)	649.2	448.7	746.2	(X)	(X)	228.4				
22117 51 22617 51	Printed and finished do	(NA)	120.9	122.1	150.0	(X)	(X)	(D)				
22117 61 22617 61	Other finished cotton fabrics (flame proofed, mildew proofed, mercerized, embossed, etc.) not bleached, dyed, or printed in the same establishment	(NA)	18.9	32.5	37.0	(X)	(X)	(D)				
22117 00 22617 00 22119 2221A 33 2221A 37	- Finished cotton broad woven fabrics, n.s.k.	(NA)	(X)	(X)	5.0	×	×	(X)				
23923	Towers and washcroths:											
22119 00 2221A 33 2221A 37 23923 00 2211A	- Towels and washcloths	(NA)	(×)	(×)	964.0	(X)	(×)	(×)				
22219 — 2221A pt 23921 pt 23922 — 23924 pt	- Other fabricated cotton textile products	(NA)	(X)	(×)	1 717.7	(X)	(X)	(×)				
23990 pt 2211A 25 22219 15 22219 25 23922 00	- Sheets and pillowcases	(NA)	(×)	(X)	1 156.3	(X)	(×)	(×)				
2211A 37 23990 26	- Diapers, woven or knitted mil dozens Bedspreads, wholly or chiefly cotton fabrics: Tailored:	(NA)	(X)	(S)	42.5	(X)	(%)	(×)				
23921 12 2211A 42 2211A 43	- Quilted million	(NA)	(X)	*.9	56.7	(X)	(X)	(X)				
23921 17 239 <b>2</b> 1 22	- Nonquilted do_     Nontailored:    - Tufted do_	(NA)	(X)	(S)	9.2	(X)	(X)	. (X)				
2211A 44 2211A 46 23921 27	Other, including jacquard do	(NA) (NA)	(X) (X)	(S) **2.7	(Z) 55.7	(×) (×)	(X) (X)	(X) (X)				
						[ 64	(4)	641				

#### Producers: 1982 and 1977-Con.

of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of

1977							
Number of companies with	0.124	Total shipme interplant	nts, including transfers <sup>1</sup>	establish	s to other nments in company	Quantity produced and	1982 product code
shipments of \$100,000 or more	Quantity of production for all purposes	Quantity <sup>2</sup>	Value (million dollars)	Quantity	Value (million dollars)	consumed in the same establishment	
(NA)	(x)	(X)	5 946.9	(X)	(X)	(X)	2211 22219 2221A pt 22617 23921 pt 23922 23923 pt 23924 pt 23990 26
(NA) (NA) (NA) (NA) (NA)	(X) (X) (X) (X)	8888	4 797.2 4 367.4 429.8 1 149.7	(X) (X) (X)	\$888	\$ \$ \$ \$ \$	L 239 <b>90 2</b> 6
							22111
24	(X)	206.9	205.4	19.3	20.1	(X)	22111 00 22112
36	(X)	708.7	571.1	183.4	174.0	(X)	22112 00
18	(X)	1 131.3	344.7	388.7	105.9	(X)	22113 22113 00
(NA) 8 13 7	(X) (X) (X) (X) (X) (X) (X) (X) (X) (X)	616.5 244.1 286.3 86.1	758.6 337.4 326.8 94.4	(X) 102.4 200.2 (D)	(X) 91.0 245.4 (D)	××××××××××××××××××××××××××××××××××××××	22114 — 22114 10 22114 30 22114 50
(NA)	(×)	(X)	(X)	(X)	(X)	(X)	22114 00
12	(X)	128.3	99.1	43.0	27.3	(X)	22115 22115 00
37 (NA)	(X) (X)	489.7 <sup>13</sup> 1 425.9	636.2 1 192.3	241.4 (X)	307.5 (X)	(X) (X)	22116 22116 00 -[ 22117 22617
23	(X)	688.6	243.9	(D)	(D)	(X)	22117 11 22617 11 22117 31
33 16	(X) (X)	603.8 43.7	778.3 37.9	(D) -	(D) -	(X) (X)	22617 31 22117 51 22617 51 22617 61 22617 61
8 (NA)	(X) (X)	89.8 (X)	129.0 3.2	(D) (X)	(D) (X)	(X) (X)	22117 00 22617 00 22119 2221A 33 2221A 37
(NA)	(×)	(×)	<del>46</del> 93.0	(X)	(X)	(×)	23923 — 22119 00 2221A 33 2221A 37 23923 00 7 2211A —
(NA)	(X)	(X)	<sup>5</sup> 1 382.3	(X)	(X)	(X)	22219 2221A pt - 23921 pt 23922 23924 pt 23990 pt
(NA)	(X)	(×)	<sup>6</sup> 906.3	(X)	(×)	(X)	2211A 25 22219 15 22219 25
5	(X)	(X)	16.4	(X)	(×)	(×)	L 23922 00 L 2211A 37 L 23990 26
(NA)	(NA) (NA)	(X) (X)	ტ ტ	(X) (X)	(X) (X)	(X) (X)	23921 12 2211A 42 2211A 43 23921 17
(NA)	(NA)	(×)	(7)	(×)	(×)	(X)	
(NA)	(NA)	· (X)	ტ	(X)	(X)	(X)	2211A 46 23921 27

## Table 6a-1. Product and Product Classes—Quantity and Value of Shipments by All Part A. Industries 2211, 2221, and 2231—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

	S III appendix. For meaning or appreviations and symbols, see introductory tex	1982								
1982 product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Total shipments, including interplant transfers1		Transfers to other establishments in the same company		Quantity		
				Quantity <sup>2</sup>	Value (million dollars)	Quantity	Value (million dollars)	produced and consumed in the same establishment		
	COTTON BROAD WOVEN FABRICS—Con.									
2211A — 22219 — 2221A pt 23921 pt 23922 — 23924 pt 23990 pt	Other fabricated cotton textile products—Con.									
2211A 62 2211A 65 2211A 67 23924 82	Blankets (woven adult) wholly or chiefly cotton mil dozens	(NA)	(X)	.3	31.4	(X)	(X)	(X)		
2211A 69 23924 86 2211A 75	Blankets (woven crib size) wholly or chiefly cotton do	(NA)	(X)	2.0	35.1	(X)	(X)	(X)		
2221A 71 2221A 72 23924 11 23924 13 23924 31	- Quilted products except bedspreads	(NA)	(X)	(X)	330.8	(×)	(X)	(X)		
23924 39 2211A 00 22110 00	Other fabricated cotton textile products, n.s.k Cotton broad woven fabrics, finished cotton fabrics, etc.,	(NA)	(X)	(×)	-	(X)	(X)	(×)		
22110 02	n.s.k., typically for establishments with 5 employees or more (see note) Cotton broad woven fabrics, finished cotton fabrics, etc.,	(NA)	(X)	(X)	113.2	(×)	(X)	(×)		
	n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(X)	(X)	23.0	(×)	(X)	(X)		
	MANMADE FIBER AND SILK BROAD WOVEN FABRICS									
2221- — 2211A pt 22628 — 23921 pt 23922 — 23923 — 23924 pt	- Total	(AA)	(X)	(X)	11 566.7	(X)	(X)	(X)		
23924 pt	Made in weaving mills Chiefly cotton Chiefly manmade fiber Made from purchased fabrics	(NA) (NA) (NA) (NA)	(X) (X) (X) (X)	(X) (X) (X) (X)	8 444.2 (D) (D) 3 122.5	(X) (X) (X) (X)	(X) (X) (X) (X) (X) (X) (X) (X) (X) (X)	(X) (X) (X) (X)		
22211 — 22211 00	Gray goods, finished goods, and fabricated products:  100 percent filament rayon and/or acetate fabrics, including combinations chiefly rayon and/or acetate:  100 percent filament rayon and/or acetate fabrics, including blends chiefly rayon and/or acetate mil sq yd	29	(D)	396.4	280.5	(D)	(D)	(D)		
22212 — 22212 00	100 percent filament fabrics, except rayon and/or acetate: 100 percent filament fabrics, except rayon and/or									
22213 — 22213 00	acetate do 100 percent spun rayon and/or acetate fabrics, including blends: 100 percent spun rayon and/or acetate fabrics,	49	(D)	2 986.1	1 448.7	527.7	285.3	207.6		
22214 —	100 percent spun polyester blends with cotton:	20	94.2	92.2	80.6	21.2	19.9	(D)		
22214 00 22215 — 22215 00 22216 —	100 percent spun polyester blends with cotton do All other 100 percent spun noncellulosic fabrics: All other 100 percent spun noncellulosic fabrics do Combinations of filament and spun yarn fabrics, chiefly	49	3 928.0 949.9	3 454.4 899.4	2 309.7 650.6	1 758.9 219.9	1 085.7 185.9	452.1 74.7		
22216 00	manmade fibers: Combinations of filament and spun yarn fabrics	35	889.6	865.6	614.7	(D)	(D)	(D)		
22217 —	chiefly manmade fibers do Blanketing, silk, paper, and other specialty manmade fiber fabrics do	(NA)	(X)	(X) 48.7	435.5	(D) (X)	(D) (X)	(D) (X)		
22217 10 22217 30	100 percent spun yarn tabrics	11	92.9 164.7	48.7 123.8	60.1 371.0	(X) (D)	(X) (D)	(X) 53.9 48.5		
22217 00	fiber fabrics, n.s.k.	(NA)	(X)	(X)	4.4	(D) (X)	(D) (X)	48.5 (X)		
22218 — 22628 — 22218 15 22218 25	Finished manmade fiber and silk broad woven goods mil fin lin yd    Bleached and white finished do	(NA)	<sup>3</sup> 2 497.3	<sup>3</sup> 2 046.9	2 933.4	(X)	(X)	3490.6		
22628 20 22218 35	5	(NA)	591.1	403.2	437.1	(X)	(X)	171.6		
22218 38 22628 30 22218 55 22218 58	Plain dyed and finished do	(NA)	1 224.8	1 139.4	1 704.7	(X)	(X)	141.0		
22628 50	Printed and tinished do	(NA)	454.1	305.1	283.7	(X)	(×)	151.6		

#### Producers: 1982 and 1977-Con.

of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of

		19	77				
Number of companies with		Total shipme interplant	nts, including transfers <sup>1</sup>	establish	s to other nments in company	Quantity	1982 product
shipments of \$100,000 or more	Quantity of production for all purposes	Quantity <sup>2</sup>	Value (million dollars)	Quantity	Value (million dollars)	produced and consumed in the same establishment	
(NA)	(X)	(8)	(8)	(×)	(×)	(X)	2211A 62 2211A 65 2211A 67 23924 82
(NA)	(X)	( <sup>8</sup> )	(8)	(X)	(X)	(X)	23924 86
(NA)	(X)	(X)	(e)	(X)	(X)	(X)	2211A 75 2221A 71 2221A 72 23924 11 23924 13 23924 31
(NA)	(×)	(×)	238.2	(X)	(X)	(X)	L 23924 39 2211A 00
(NA)	(X)	(X)	<sup>9</sup> 44.3	(X)	(X)	(X)	22110 00
(NA)	(X)	(X)	19.9	(X)	(×)	(X)	22110 02
(NA) (NA) (NA) (NA) (NA)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	8 <b>454.5</b> 6 394.9 (D) (D) 2 059.6	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X) (X)	(X) (X) (X) (X) (X)	2221 2211A pt 22628 23921 pt 23922 23923 23924 pt
32	(X)	534.8	265.7	(D)	(D)	(X)	22211 22211 00 22212
58	(X)	1 750.9	1 149.5	317.1	256.4	(X)	22212 00 22213
23	(X)	340.1	184.3	26.6	19.4	(X)	22213 00 22214 —
33	(X) (X)	2 096.0 424.9	1 664.1 404.0	990.4	850.5 106.9	(X) (X)	22214 00 22215 22215 00
44	(×)	496.3	461.5	93.0	82.6	(X)	22216 22216 00
20 (NA)	(X) (X)	186.7 (X)	171.7 (X)	(D) (X)	(D) (X)	(X) (X)	22217 22217 10
(NA)	(X)	(X)	(×)	(X)	(X)	(×)	22217 30
(NA) (NA)	(X) (X)	(X) <sup>3</sup> 2 047.4	(X) 2 430.5	(X) (X)	(X) (X)	(X) (X)	22217 00 
16	(X)	783.2	714.1	(D)	(D)	(X)	22218 15 - 22218 25 - 22628 20
38	(X)	868.4	1 129.3	17.4	23.2	(X)	22218 35 22218 38 22628 30
21	(X)	160.3	173.9	(D)	(D)	(X)	22218 55 22218 58 22628 50

## Table 6a-1. Product and Product Classes—Quantity and Value of Shipments by All Part A. Industries 2211, 2221, and 2231—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

	1982							
1982 product	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Total shipments, including interplant transfers <sup>1</sup>		Transfers to other establishments in the same company		Quantity
code				Quantity <sup>2</sup>	Value (million dollars)	Quantity	Value (million dollars)	produced and consumed in the same establishment
	MANMADE FIBER AND SILK BROAD WOVEN FABRICS—Con.			-				
22218 — 22628 — 22218 64	Finished manmade fiber and silk broad woven goods— Con.							
22218 67 22628 61	Other finished manmade fiber fabrics not bleached, dyed, or printed at the same establishment (flame proofed, mildew proofed, mercerized, embossed, etc.)	(NA)	227.3	199.2	476.9	(X)	(X)	26.4
22218 00 22628 00	Finished manmade fiber and silk     broad woven goods, n.s.k.	(NA)	(X)	(X)	31.0	(X)	(X)	(X)
22219 2211A 25 23922	Sheets and pillowcases:							
22219 15 22219 25 2211A 25 23922 00 2221A	Sheets and pillowcases	(NA)	(X)	(×)	1 156.3	(X)	(X)	(×)
22119 23921 pt 23923 23924 pt	- Other fabricated manmade fiber and silk textile products	(NA)	(X)	(×)	1 315.5	(X)	(X)	(X)
2221A 33 2221A 39 22119 00 23923 00	- Towels and washcloths	(NA)	(X)	(×)	964.0	(X)	(X)	(X)
	Bedspreads, wholly or chiefly manmade fibers:  100 percent spun yarn:							
2221A 21 23921 13	Tailored million	(NA) (NA)	(X) (X)	(S) (S)	83.7 75.8	(X) (X)	(X) (X)	(X) (X)
2221A 23 23921 18 2221A 25	Nonquilted do   Nontailored do	(NA) (NA)	(X) (X) (X)	(S) *5.6	7.9 70.8 9.8	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)
23921 23 2221A 27 23921 28	Other do 100 percent filament yarn fabrics and combinations of	(NA)	(X)	*4.7	61.0	(X)	(X)	(×)
2221A 22	filament and spun: Tailoreddo	(NA)	(X)	(S)	61.1	(X)	(X)	(X)
23921 15 2221A 24 23921 19	Description of the control of the co	(NA) 7	(X) (X)	(S) 1.2	46.0 15.1	(X) (X)	(X)	(x)
2221A 26 23921 25	Nontailored:	(NA)	(X)	.3	6.4	(X)	(X)	(X)
2221A 28 23921 29 2221A 41	Other do Adult woven blankets, wholly or chiefly manmade fibers:	(NA)	(X)	(S)	24.4	(X)	(X)	(X)
2221A 42 2221A 43 23924 83 2221A 44	100 percent spun yarn fabricsmil doz	(NA)	(X)	(D)	(D)	(X)	(X)	(X)
2221A 45 2221A 46 23924 84	100 percent filament fabrics and combinations of spun and filament do	-	(X)	-	-	(X)	(X)	(X)
2221A 47 23924 87	Woven crib size blankets, wholly or chiefly manmade fibers:  100 percent spun yarn fabric do	(NA)	(X)	*.2	11.1	(X)	(X)	(X)
2221A 48 23924 88	100 percent filament yarn fabrics and combinations of spun and filament	(NA)	(X)	(D)	(D)	(X)	(X)	(X)
2221A 71 2221A 72	manmade fiber.  100 percent spun yarn fabric million  100 percent filament yarn fabric and combinations of	3	(X)	(D)	(D)	(X)	(X)	(X)
2221A 00	spun and filament do_ Other fabricated manmade fiber and silk textile products, n.s.k.	(NA)	(X) (X)	- (X)	-	(X) (X)	(X) (X)	(X) (X)
22210 00	Manmade fiber and silk broad woven fabrics, finished fabrics, etc., n.s.k., typically for establishments with 5 employees or more (see note)	(NA)	(×)	(X)	314.4	(X)	(X)	(×)
22210 02	Manmade fiber and silk broad woven fabrics, finished fabrics, etc., n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(x)		26.8	(x)	(X)	(X)

## Producers: 1982 and 1977-Con.

of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of

				77	19		
1982 produc code	Quantity	s to other ments in company	Transfers to establishme the same co	nts, including transfers <sup>1</sup>	Total shipme interplant		Number of companies with
	produced and consumed in the same establishment	Value (million dollars)	Quantity	Value (million dollars)	Quantity <sup>2</sup>	Quantity of production for all purposes	shipments of \$100,000 or more
22218 64 22218 67							
22628 61	(X)	52.6	42.1	408.7	235.5	(X)	27
22218 00 22628 00							
22219 - 2211A 25	(X)	(X)	(X)	4.5	(X)	(X)	(NA)
2211A 25 23922 2- 22219 15 22219 25 2211A 25 23922 00 2221A 23921 pt 23923 23924 23	(X)	(X)	(×)	<sup>6</sup> 906.3	(X)	(X)	(NA)
22119 23921 pt 23923	(X)	(X)	(X)	(X)	(X)	(×)	(NA)
23924 pt 2221A 33 2221A 39 22119 00 23923 00	(X)	(X)	(X)	4693.0	¢ (X)	(X)	(NA)
F 2221 A 21	(X)	(X)	(×)	(7)	<b>(7)</b>	(×)	(NA)
2221A 21 23921 13 2221A 23	(X) (X)	(X) (X)	(X) (X)	(7)	(7) (7)	(X) (X)	(NA) (NA)
L 23921 18	(X) (X)	(X) (X)	(X) (X)	(?) (?)	(7) (7)	(X) (X)	(NA) (NA)
23921 23 2221A 27 23921 28	(X)	(×)	(X)	(7)	(7)	(X)	(NA)
	(X)	(×)	(X)	(7)	(7)	(X)	(NA)
2221A 22 23921 15 2221A 24	(X) (X)	(X) (X)	(X) (X)	(7) (7)	(7) (7)	(X) (X)	(NA) (NA)
L 23921 19 _	(X)	(X)	(X)	(7)	(7)	(X)	(NA)
23921 25 2221A 28 23921 29	(X)	(×)	(X)	(7)	(7)	(X)	(NA)
2221A 41 2221A 42 2221A 43 23924 83 7 2221A 44	(X)	(X)	(X)	(8)	( <sup>8</sup> ) !	(X)	(NA)
2221A 45 2221A 46 23924 84	(X)	(×)	(×)	(8)	( <sup>8</sup> )	(X)	(NA)
_ 2221A 47 _ 23924 87 _ 2221A 48	(X)	(X)	(×)	( <sup>8</sup> )	(8)	(X)	(NA)
23924 88	(X)	(×)	(X)	(8)	(8)	(X)	(NA)
2221A 71 2221A 72 2221A 00	(×)	(×)	(×)	(e)	(9)	(X)	(NA)
22210 00	(X)	(×)	(X)	*108.2	(X)	(X)	(NA)
22210 02	(X)	(x)	(×)	18.7	(X)	(X)	(NA)

# Table 6a-1. Product and Product Classes—Quantity and Value of Shipments by All Part A. Industries 2211, 2221, and 2231—Con.

[Includes quentity and velue of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers Shipments in eppendix. For meaning of ebbrevietions end symbols, see introductory text]

	s in eppendix. For meaning or eobrevietions end symbols, see introductory text	·			1982			
1982 product code	Product	Number of companies with		Total shipme interplant	nts, including transfers <sup>1</sup>	Transfers establish the same	ments in	Quentity
		shipments of \$100,000 or more	Quantity of production for all purposes	Quantity <sup>2</sup>	Value (million dollars)	Quentity	Value (million dollars)	produced and consumed in the same establishment
	WEAVING AND FINISHING MILLS, WOOL							
2231 23924 85 23924 89	Total	(NA) (NA)	(X)	(X)	<sup>10</sup> 83 <b>4.0</b>	(X)	(X) (X)	( <b>X</b> )
	Made in weaving mills Mede from purchesed fabric	(NA)	(X)	× ×	(D)	(X) (X)	-	74
22311 22311 00	Finished wool yarn, tops, or rew stock, not combed or spun at same establishment: Finished wool yarn, top, raw stock, etc., not combed or spun et the seme esteblishment mil lb	8	(×)	(D)	(D)	(×)	(X)	(X)
22312 — 22312 00	Wool fabrics (gray goods); Wool broad woven fabrics (gray goods)mil sq yd	17	122.6	42.6	137.8	30.8	101.8	83.7
22313 — 22313 00	Finished wool apparel fabrics: Finished broad woven wool apparel fabrics mil fin lin yd	24	73.6	72.7	501.4	(X)	(X)	(D)
22314 <del></del> 22314 00	Finished wool nonapparel fabrics and felts: Finished broad woven wool nonapparel fabrics and felts do	12	(S)	(S)	68.7	(×)	(×)	(D)
22315	Receipts for commission finishing or sponging of wool fabrics	(NA)	(X)	(X)	(D)	(%)	(X)	_
22315 91 22315 92	Shrinking, sponging, mending, etc., of wool cloth owned by others  Job or commission finishing of wool broad woven fabrics	3	(X)	(X)	(D)	(X)	(×)	(X)
22315 93 22315 00	(excluding shrinking, sponging, mending, etc., of wool cloth owned by others)	2 1	(D) (X)	(D) (X)	(D) (D)	(X) (X)	(X)	88
22315 02	typically for establishments with 10 employees or more  Receipts for commission finishing of wool textiles, n.s.k.,	(NA)	(×)	(X)	-	(X)	(X)	(X)
	typically for establishments with less than 10 employees	(NA)	(×)	(X)	.4	(X)	(X)	(X)
22319 25 22319 27 22319 29 22319 31 22319 71 23924 85	- Wool fabricated products <sup>11</sup> <sup>12</sup> <sup>9</sup> mil dozens	9	(X)	**.1	15.2	(X)	(×)	(X)
23924 89 22319 25 22319 27 22319 29 23924 85	Adult blankets <sup>11</sup> <sup>12</sup> do	9	(×)	(D)	(D)	(×)	(X)	(×)
22319 31 23924 89 22319 71	Crib blankets <sup>11</sup> <sup>12</sup> do Quilted products, except bedspreads, wholly or chiefly	(NA)	(×)	(D)	(D)	(X)	(X)	(X)
22319 00 22310 00	wool fabricased products, n.s.k. Wool broad woven fabrics, finished wool fabrics, etc.	(NA) (NA)	(X) (X)	(X)	9.4	8	(X)	8
22310 02	n.s.k., typically for establishments with 10 employees or more (see note)  Wool broad woven fabrics, finished wool fabrics, etc., n.s.k., typically for establishments with less than 10	(NA)	×	(X)	37.8	(X)	(×)	(X)
	employees (see note)	(NA)	(X)	(X)	6.5	(X)	(×)	(X)

## Producers: 1982 and 1977-Con.

of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of

		19	77				
Number of companies with		Total shipme interplant	ents, including transfers <sup>1</sup>	establist	s to other hments in e company	Quantity	1982 product
shipments of \$100,000 or more	production	Quantity <sup>2</sup>	Value (million dollars)	Quantity	Value (million dollars)	Quantity produced and consumed in the same establishment	
(NA) (NA)	(X)	(X)	581.3 581.3	(x)	(X)	(X)	2231 23924 85 23924 89
(NA)	(X) (X)	(X) (X)	( <sup>10</sup> )	(X) (X)	(X) (X)	(X) (X)	
						:	22311
18	(X)	20.8	39.5	(X)	(X)	(X)	22311 00
17	(X)	22.4	97.3	(X)	(X)	(X)	22312 22312 00
23	(X)	74.3	299.3	(X)	(X)	(X)	22313 22313 00
							22314
16	(X)	9.3	83.2	(X)	(×)	(X)	22314 00
(NA)	(X)	(X)	26.8	(X)	(X)	(X)	22315
10	(X)	(×)	4.5	(X)	(X)	(X)	22315 91
7 3	(X) (X)	(S) (X)	17.1 1.1	(X) (X)	(X) (X)	(X) (X)	22315 92 22315 93
(NA)	(X)	(X)	.4	(X)	(X)	(X)	22315 00
(NA)	(X)	(X)	3.7	(X)	(X)	(X)	22315 02 22319 25 22319 27
9	(X)	*.1	9.2	(×)	(×)	(X)	22319 29 22319 31 22319 71 23924 85 23924 89 22319 25
(NA)	(X)	(11 12)	(11 12)	(X)	(X)	(X)	22319 27 22319 29 23924 85
(NA)	(X)	(11 12)	(11 12)	(X)	(X)	(X)	22319 31 23924 89
(NA) (NA)	(X) (NA)	( <sup>9</sup> ) (NA)	( <sup>9</sup> ) (NA)	(X) (NA)	(X) (NA)	(X) (NA)	22319 71 22319 00
(NA)	(X)	(X)	<sup>9</sup> 16.6	(X)	(X)	(X)	22310 00
(NA)	(X)	(X)	9.4	(X)	(X)	(X)	22310 02

# Table 6a-1. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1982 and 1977—Con.

## Part B. Industry 2241

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

			1982			1977	
1982		Number of	Product sl	hipments1	Number of	Product s	hipments1
product code	Product	companies with shipments			companies with shipments		
oode		of \$100,000		Value (million	of \$100,000		Value (million
		or more	Quantity <sup>2</sup>	dollars)	or more	Quantity <sup>2</sup>	dollars)
	NARROW FABRIC MILLS						
2241	Total	(NA)	(X)	826.1	(NA)	(NA)	645.0
22411	Woven narrow fabrics:						
22411 01	Woven elastic narrow fabrics: As reported in the census of manufactures As reported in the Current Industrial Report MA-22G,	39	(X)	170.4	39	(X)	143.7
	As reported in the Current Industrial Report MA-22G, Narrow Fabrics	(NA)	(X)	169.3	(NA)	′1 506.9	136.5
	Corset and allied lines:	(212)	204.0	40.4	(818)	.004.0	
22411 02 22411 03 22411 04	Corset and aillied inles:   3/4 in, or less   mil lin yd_	(NA) (NA)	294.0 56.6	43.1 7.3	(NA) (NA)	'261.0 '38.0	′26.5 4.3 ′4.5
22411 05	More than 3 in. to 6 in	(NA) (NA)	10.0 (D) (D)	4.5 (D) (D)	(NA) (NA)	′12.2 (D) (D)	'4.5 (D) (D)
22411 06		(NA)	(D)	(U)	(NA)	(U)	(D)
22411 12 22411 21	Underwear do Other apparel do	(NA) (NA)	336.5 231.9	40.3 30.8	(NA) (NA)	571.6 '285.5	′40.7 ′29.0
22411 23 22411 10	Other uses do Woven elastic narrow fabrics, n.s.k	(NA) (NA)	259.1 (X)	39.3	(NA) (NA)	'249.8 (X)	'30.3 -
22411 31	Woven nonelastic narrow fabrics:	68	(X)	394.0	72	(X)	266.2
LLTITOT	As reported in the census of manufactures As reported in the Current Industrial Report MA-22G, Narrow Fabrics	(NA)	(X)	397.1	(NA)	(X)	275.5
		(,	(7.7)	55711	(,,,,	(74)	210.0
22411 83 22411 85	Ribbons, woven edge: Packaged for over-the-counter sale	7- (NA)	729.2	66.1	(NA)	471.7	′28.7
22411 71	Packaged for over-the-counter sale do	(NA)	3 648.5	66.3	(NA)	2 588.5	'32.8
22411 51	Tapes (wt. less than 15 oz./sq. yd.):	(NA)	232.1	101	(NA)	′850.4	, OE 9
22411 52 22411 54	Zipper tape mil lin yd_ Apparel tape, except zipper tape	(NA) (NA)	766.7 288.7	12.1 31.3 10.3	(NA)	'587.6 '273.8	′25.8 ′20.5 ′10.1
22411 56	Household articles tapedo All other tape do	(NA)	1 087.0	35.6	(NA) (NA)	1 083.6	26.1
22411 33	Webbing (wt. 15 oz./sq. yd. or more): Apparel webbing	(NA)	(D)	(D)	(NA)	(D)	(D)
22411 35 22411 37	Apparel webbing do. Household articles webbing do. Safety belt webbing do. All other webbing do. All other woven nonelastic fabrics Woven nonelastic narrow fabrics, n.s.k.	(NA) (NA)	(D) (D) 64.4	(D) 21.1	(NA) (NA)	(D) 146.7	(D) (D) 32.9
22411 39 22411 98	All other webbing do	(NA) (NA)	295.7 I	44.9 61.6	(NA) (NA)	'227.4 (X)	'37.9 '48.1
22411 20 22411 00	Woven nonelastic narrow fabrics, n.s.k. Woven narrow fabrics, n.s.k.	(NA) (NA)	(X) (X) (X)	3.8	(NA) (NA)	(2)	3.6
22414 —	Braided narrow fabrics:	(147.7)	(7)	0.0	(147)	(*)	0.0
22414	Braided narrow fabrics:  As reported in the census of manufactures	53	(%)	135.7	45	()	133.4
22414 00	As reported in the Current Industrial Report MA-22G,	(NA)	(X) (X)	143.6		(X)	
22414 11	Narrow Fabrics Elastic braids (flat, round, and tubular) mil lin yd	(NA) (NA)	945.4	36.0	(NA) (NA)	1 223.8	′127.4 ′37.5
22414 21	Nonelastic braids: Shoe and corset lacesmil lb	(NA)	932.0	41.1	(NA)	9.1	'30.7
22414 31 22414 98	Other nonelastic braids	(NA) (NA)	(X) (X)	66.0	(NA) (NA) (NA)	(X)	'59.2 -
22415	Covered rubber thread:						
22415 00 22410 00	Covered rubber threadmil lb_ Narrow fabrics, n.s.k., typically for establishments with 5	(NA)	*24.2	86.8	14	20.6	56.1
22410 02	employees or more (see note)  Narrow fabrics, n.s.k., typically for establishments with less than 5 employees (see note)	(NA)	(X)	23.1	(NA)	(X)	20.7
	t nan 5 employees (see note)	(NA) l	(X) I	12.3	(NA)	(X) I	21.3

See footnotes at end of table.

## Table 6a-1. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1982 and 1977-Con.

Part B. Industry 2241-Con.

Note: In 1982 Census of Manufactures, data for establishments of smell single-unit companies with up to 20 employees were estimated from administrative records data rather than data actually collected from respondents. Employment cutoff used for administrative records for each industry and shipments figures are included in code ending with "002". In both 1982 and 1977 Censuses of Manufactures, products not completely identified on standard forms were coded in appropriate product class (five-digit) followed by "000" or to appropriate product group code (four-digit) followed by "000".

¹Data reported by all producers, not just those with shipments of \$100,000 or more.

²For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quentity figure estimated in this manner equals or exceeds 10 percent of published figure: \* 10 to 19 percent estimated; \*\* 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

³Excludes fabrics finished, n.s.k.

'in 1977, towels and washcloths made in weeving mills were included in product clesses 22119, cotton; and 22210, menmade fiber; and those made from purchased fabric in product class 23929.

class 23929.

In 1977, other fabricated cotton textile products were included under product class 22110.

In 1977, sheat and pillowcases made in weaving mills were included in product classes 22118, cotton; and 22219, manmade fiber; and those made from purchased fabric in product class 23928.

In 1977, bedspreads and bedsets are included in the teble totel but could not be shown seperately to avoid disclosing data of individual companies.

In 1977, data for blankets made from purchased febric were not collected seperately. Blenkets mede in weaving mills were included in product classes 22110, cotton; 22210, manmade fiber; and those made from purchased febric were not collected seperately. Blenkets mede in weaving mills were included in product classes 22110, cotton; 22210, manmade fiber; and those made from purchased febric in 2920. Furthermore, the product descriptions collected for 1977 ere not directly compereble to the 1982 product descriptions.

In 1977, data for quilted products, except bedspreeds mede in weaving mills, were not collected separately. Data for thase products were included in product classes 22110, cotton; 22210, manmade; and 22310, wool; end those made from purchased febric in product class 23920.

These data exclude blankets made from purchased febric to avoid disclosing date for individual companies.

There is a few wool and chiefly wool blankets made from purchased febric were not collected separately. For 1982, separate data were collected under product codes 23924 85 and 23924 89.

and 23924 89.

13 For 1977, data for wool and chiarly wool blankats made from purchased febric were not collected separately. For 1982, separate data ware collected under product codes 23924 85 and 23924 85.

13 For 1977, data for wool and chiarly wool blankats made in weeving mills were collected under product code 22319 23, bad and camp blankets, motor robe sets, including crib and regular size. For 1982, product code 22319 23 was split out into product codes 22319 25, 22319 29, and 22319 31.

# Table 6a-2. Selected Products Primary to More Than One Industry-Quantity and Value of

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

Snipments	s in appendix. For meaning of abbreviations and symbols, see introductory text	u .			1982			
1982 product	Product	Number of companies with		Total shipme interplant	nts, including transfers <sup>1</sup>	Transfers establish the same	ments in	Quantity
code		shipments of \$100,000 or more	Quantity of production for all purposes	Quantity <sup>2</sup>	Value (million dollars)	Quantity	Value (million dollars)	produced and consumed in the same establishment
22117 — 22617 —	Finished cotton broad woven fabric mil fin lin vd_	(NA)	<sup>3</sup> 1 827.1	<sup>3</sup> 1 006.0	1 161.0	(X)	(X)	<sup>3</sup> 871.5
22117	Finished in weaving mills do	(NA)	³655.2	³395.2	724.8	(X)	(X)	3298.2
22617	Finished in other industries do	(NA)	<sup>3</sup> 1 171.9	610.8	436.2	(X)	(X)	3573.3
22117 11 22617 11	Bleached and white finished do	(NA)	1 038.1	402.7	222.8	(X)	(X)	630.8
22117 11	Finished in weaving mills do	9	242.3	115.9	119.5	(X)	(X)	115.3
22617 11	Finished in other industries do	17	795.8	286.8	103.2	(X)	(X)	515.5
22117 31 22617 31	Plain dyed and finisheddo	(NA)	649.2	448.7	746.2	(X)	(X)	228.4
22117 31	Finished in weaving mills do	21	367.8	217.8	502.4	(X)	(X)	175.3
22617 31	Finished in other industries do	16	281.4	230.9	243.8	(X)	(X)	53.1
22117 51 22617 51	Printed and finished do	(NA)	120.9	122.1	150.0	(X)	(X)	(D)
22117 51	Finished in weaving mills do	3	(D)	(D)	(D)	(X)	(X)	(D)
22617 51	Finished in other industries do	21	(D)	(D)	(D)	(X)	(X)	(D)
22117 61 22617 61	Other finished cotton fabric (flameproofed, mildew proofed,							
	mercenzed, embossed, etc.) not bleached, dyed, or printed in the same establishment do	(NA)	18.9	32.5	37.0	(X)	(X)	(D)
22117 61	Finished in weaving mills do	4	(D)	(D)	(D)	(X)	(X)	(D)
22617 61	Finished in other industries do	3	(D)	(D)	(D)	(X)	(X)	(D)
22117 00 22617 00	Finished cotton broad woven fabric, n.s.k do	(NA)	(X)	(X)	5.0	(×)	(X)	(X)
22117 00	Finished in weaving mills do	(NA)	(X)	(X)	4.1	(X)	(X)	(X)
22617 00 22218	Finished in other industries do	(NA)	(X)	(X)	.9	(X)	(X)	(X)
22628	Finished manmade fiber and silk broad woven fabric mil fin lin	(NA)	<sup>3</sup> 2 497.3	³2 046.9	2 933.4	(X)	(X)	3490.6
22218 22628	Finished in weaving mills	(NA) (NA)	<sup>3</sup> 843.8 <sup>3</sup> 1 653.5	³664.9 ³1 382.0	1 109.7 1 823.7	(X)	(X) (X)	<sup>3</sup> 230.3 <sup>3</sup> 260.3
22218 15 22218 25	Bleached and white finisheddo	(NA)	591.0	403.2	437.1	(×)		171.6
22628 20	Finished in weaving mills:	(NA)	331.0	403.2	437.1	(^)	(X)	171.0
22218 15 22218 25	100 percent spun yarn fabric do 100 percent filament yarn fabric do	7 4	239.7 76.1	92.6 70.4	122.5 51.6	(X) (X)	(X) (X)	135.6
22628 20	Finished in other industries do	17	275.2	240.2	263.0	(X)	(X)	35.6
22218 35 22218 38	Plain dyed and finsheddo	(NA)	1 224.8	1 139.4	1 704.7	(X)	(X)	141.0
22628 30	J Finished in weaving mills:	1						
22218 35 22218 38	100 percent spun yarn fabricdo 100 percent filament yarn fabricdo	17 17	213.1 141.7	235.2 149.4	454.3 297.8	(X) (X)	(X) (X)	45.9
22628 30	Finished in other industries do	20	870.1	754.8	952.6	(X)	(X)	95.1
22218 55 22218 58 22628 50	Printed and finished do	(NA)	454.2	305.1	283.7	(X)	(X)	151.6
	Finished in weaving mills:							
22218 55 22218 58	100 percent spun yam fabric do 100 percent filament yam fabric do	4 4	]- 100.1	46.3	83.4	(X)	(X)	48.4
22628 50	Finished in other industries do	18	353.6	258.8	200.3	(X)	(X)	103.2
22218 64 22218 67	Other finished and a							
22628 61	Other finished manmade fiber fabric not bleached, dyed or printed at the same establishment (flameproofed, mildew proofed, mercerized, embossed, etc.)	(814)	207.0	100.0	470.0			20.4
22210.04	Finished in weaving mills:	(NA)	227.3	199.2	476.9	(X)	(X)	26.4
22218 64 22218 67	100 percent spun yarn fabric do 100 percent filament yarn fabric do	5 6	17.3 55.4	18.4 52.6	25.9 58.8	(X) (X)	(X) (X)	=
22628 61	Finished in other industries do	8	154.6	128.2	392.2	(X)	(X)	26.4
22218 00 22628 00	Finished manmade fiber and silk fabric, excluding commission finishing, n.s.kdo	(NA)	(X)	(X)	31.0	(X)	(X)	. (x)
22218 00	Finished in weaving millsdo	(NA)						
22628 00	Finished in other industries do	(NA) (NA)	(X)	(X) (X)	15.4	(X) (X)	(X) (X)	(X)
			6.7	(,,,,	10.01	(7)	(//) 1	(7)

# Shipments by Industry: 1982 and 1977—Con.

of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of

		to other	Transfers					
198: produ code	Quantity	ments in	Transfers to ot establishments the same comp	ocluding fers <sup>1</sup>	Total shipments, ir interplant trans	Quantity of	Number of companies with	
	produced and consumed in the same establishment	Value (million dollars)	Quantity	Value (million dollars)	Quantity <sup>2</sup>	Quantity of production for all purposes	shipments of \$100,000 or more	
22117								
L	(X)	(X)	(X)	1 192.3	<sup>(3</sup> 1 425.9	(X)	(NA)	
22117	(X) (X)	(X) (X)	(X) (X)	928.1 264.1	<sup>13</sup> 866.0 <sup>3</sup> 559.9	(X) (X)	(NA)	
_ 22117	(A) (D)	(A) (D)	(A) (D)	243.9	688.6	(x) (x)	23	
L 22617	(0)	(0)	(0)	243.9	000.0	(^)	23	
22117	(X)	(D)	(D)	(D)	(D)	(X)	(NA)	
22617	(X)	(D)	(D)	(D)	(D)	(X)	(NA)	
-[ 22117 22617	(X)	(D)	(D)	778.3	603.8	(X)	32	
22117	(×)	(D)	(D)	(D)	(D)	(X)	(NA)	
22617	(X)	(D)	(D)	(D)	(D)	(X)	(NA)	
_ 22117	(X)	_	_	37.9	43.7	(X)	16	
L 22617								
22117	(X)	-	-	(D)	(D)	(X)	(NA)	
22617	(X)	-	-	(D)	(D)	(X)	(NA)	
22117 22617								
L	(X)	(D)	(D)	129.0	89.8	(X)	8	
22117	(×)	(D)	(D)	(D)	(D)	(×)	(NA)	
22617	(×) (×)	(D)	(D)	(D)	(D)	(X)	(NA)	
_[ 22117 22617	(×)	(X)	(X)	3.2	(X)	(X)	(NA)	
L 22617	(^)	(^)	(^)	0.2	(24)	(7)	(10.9)	
22117	(X)	(X)	(X)	(D)	(X)	(X)	(NA)	
22617 F 22218	(X)	(X)	(X)	(D)	(X)	(X)	(NA)	
22628	(X)	(X)	(X)	2 430.5	32 047.4	(X)	(NA)	
22218	(X) (X)	(X) (X)	(X) (X)	1 127.0 1 303.5	<sup>3</sup> 798.9 <sup>3</sup> 1 248.5	(X)	(NA) (NA)	
22628 F 22218	(^)	(^)	(^)	1 303.5	1 240.5	\^\	(142)	
22218 22218 22628	(X)	(D)	(D)	714.1	783.2	(X)	16	
_[ 22218 22218	(X)	(D)	(D)	(D)	(D)	(X)	(NA)	-
22628	(X)	(D)	(D)	(D)	(D)	(X)	(NA)	
22218	(X)	23.2	17.4	1 129.3	868.4	(X)	38	
L 22628	(74)	20.2	,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		( )		
_ 22218	(×)	(D)	(D)	(D)	(D)	(X)	(NA)	-
22628	(×)	(D)	(D)	(D)	(D)	(×)	(NA)	
	(^)	(0)	(6)	(0)	(6)	(**)		
22218 22218 22628	(X)	(D)	(D)	173.9	160.3	(X)	21	
<b>√</b> 22218	00			(5)	(D)	(%)	(NIA)	L
L 22218	(X)	(D)	(D)	(D)	(D)	(X)	(NA)	
22628	(X)	(D)	(D)	(D)	(D)	(X)	(NA)	
22218 22218 22628								
22020	(X)	52.6	42.1	408.7	235.5	(X)	27	
22218	(X)	(D)	(D)	(D)	(D)	(X)	(NA)	}
22218								
22628	(X)	(D)	(D)	(D)	(D)	(X)	(NA)	
22628	(×)	(X)	(X)	4.5	(X)	(×)	(NA)	
0000								
22218	(X) (X)	(x) (x)	(X) (X)	(D) (D)	(X) (X)	(X) (X)	(NA) (NA)	

# Table 6a-2. Selected Products Primary to More Than One Industry—Quantity and Value of

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers Shipments in appendix. For meaning of abbreviations and symbols, see introductory text)

Shipments	in appendix. For meaning of abbreviations and symbols, see introductory text				1982			
1982 product	Product	Number of companies with		Total shipmer interplant	nts, including transfers <sup>1</sup>	Transfers establish the same	ments in	Quantity
code		shipments of \$100,000 or more	Quantity of production for all purposes	Quantity <sup>2</sup>	Value (million dollars)	Quantity	Value (million dollars)	produced and consumed in the same establishment
23921 2211A pt	Bedspreads and bedsets	(NA)	(X)	(X)	402.8	(X)	(X)	(X)
2221A pt 2211A pt 2221A pt	Made in weaving mills	(NA)	(X)	(X)	71.4	(X)	(X)	(X)
23921	Made from purchased fabric	(NA)	(X)	(X)	331.4	(X)	(X)	(X)
23921 12 2211A 42 23921 12	Wholly or chiefly cotton fabric million do	(NA) 18	(X) (X) (X)	*.9 (D)	56.7 (D)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)
2211A 42 23921 13	Made in weaving mills do Wholly or chiefly manmade fiber fabric:	1		(D)	(D)	` '		
2221A 21 23921 13	Made from purchased fabricdodododo	(NA) 13	(X) (X) (X)	(S) (D)	75.8 (D)	(X) (X) (X)	(X) (X) (X)	(X) (X)
2221A 21 23921 15 2221A 22	Made in weaving mills do   100 percent filament yarn fabric and combination of	1	(X)	(D)	(D)		(X)	(X)
23921 15	filament and spun do Made from purchased fabric do Made in weaving mills do do	(NA) 25	(X) (X)	(S) (S)	46.0 46.0	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)
2221A 22 23921 17	Made in weaving milis	(NA)	(X)	(S)	9.2	(×) (×)	(×)	(x)
2211A 43 23921 17 2211A 43	Made from purchased fabric do Made in weaving mills do	7	(^) (X) (X)	(S)	9.2	(×) (X) (X)	(X) (X)	(X)
23921 18	Wholly or chiefly manmade fiber fabric:  100 percent spun yarn fabric	4	(X)	(Š)	7.9	(X)	(×)	(X)
2221A 23 23921 18 2221A 23	Made from purchased fabricdo Made in weaving millsdo	4	(X)	(S)	7.9	(X)	(X) (X)	(X) (X)
23921 19 2221A 24	100 percent filament yarn fabric and combinations of	7		1.2	45.4			
23921 19 2221A 24	filament and spundo_ Made from purchased fabricdo_ Made in weaving millsdo_	7	XXX	1.2	15.1 15.1	(X) (X)	(X) (X) (X)	(X) (X) (X)
23921 22 2211A 44	Nontailored tufted: - Wholly or chiefly cotton fabric do	(NA)	(X)	(S)	(Z)	(X)	(X)	(X)
23921 22 2211A 44	Made from purchased fabric do Made in weaving mills do	(NA) -	(X) (X)	(S)	(Z)	(X) (X)	(X) (X)	(X) (X)
23921 23 2221A 25	Wholly or chiefly manmade fiber fabric:  100 percent spun yarn fabric do	(NA)	(X)	.9	9.8	(X)	(X)	(X)
23921 23 2221A 25 23921 25	Made from purchased fabric do Made in weaving mills do	2 2	(X)	00	(D) (D)	(X)	(X)	(X) (X)
2221A 26	100 percent filament yarn fabric and combinations of filament and spundo	(NA)	(X)	.3	6.4	(X)	(X)	(x)
23921 25 2221A 26	Made from purchased fabric do Made in weaving mills do_ Nontailored, except tuffed:	3 1	888	00	(D) (D)	<b>888</b>	(X) (X)	(X)
23921 27 2211A 46 23921 27	- Wholly or chiefly cotton fabric do	(NA)	(X)	**2.7	55.7	(X)	(X)	(X)
2211A 46	Made from purchased fabricdo_ Made in weaving millsdo_ Wholly or chiefly manmade fiber fabric;	2	88	(D) (D)	(D)	(X) (X)	(X)	
23921 28 2221A 27 23921 28		(NA)	(X)	*4.7 (D)	61.0 (D)	(X)	(X) (X)	(x) (X)
2221A 27 23921 29	Made in weaving mills do	3	(X)	(D) (D)	Ö	(X)	(X)	(X)
2221A 28 23921 29	100 percent filament yarn fabric and combination of filament and spun do-Made from purchased fabric	(AM) 9	(X)	(S) (S)	24.4 24.4	(X) (X)	(X)	(X)
2221A 28 23921 00 23922 00	Made from purchased fabric	(NA)	8888	(X)	34.8	8888	(X) (X) (X) (X) (X) (X) (X) (X) (X) (X)	(X) (X) (X) (X)
2211A 25 22219 15	- Sheets and pillowcases	(NA)	(X)	(X)	1 156.3	(X)	(X)	(X)
22219 25 23922 00	_J Made from purchased fabric Made in weaving mills:	32	(X)	(X)	677.6	(X)	(X)	(X)
2211A 25	Chiefly cotton Chiefly manmade fiber:	2	(X)	(X)	(D)	(X)	(X)	(X)
22219 15 22219 25 23923 00 22119 00	100 percent spun 100 percent filament	1	(X) (X)	(X) (X)	283.1 (D)	(X)	(X) (X)	(X) (X)
22119 00 2221A 33 2221A 37	Towels and washcloths	(NA)	(X)	(X)	964.0	(X)	(X)	(X)
23923 00	Made from purchased fabric	28	(X)	(X)	355.9	(X)	(X)	(X)
22119 00 2221A 33	Chiefly cotton	7	(X) (X)	(X) -	608.1	(X) (X)	(X) (X)	(X) (X)
2221A 37 23924 pt 2211A pt		-	(X)	-	-	(X)	(X) (X)	(X) (X)
2221A pt 22319 pt	Woven blankets mil doz	(NA)	(X)	7.1	181.3	(X)	(X)	(X)
23924 pt 2211A pt 2221A pt	Made from purchased fabricdo  Made in weaving millsdo	(NA) (NA)	(X)	4.2	102.7	(X)	(X)	(X)
22319 pt	[]	(IAN)	(X)	2.9	78.6	(X)	(X)	. (X)

# Shipments by Industry: 1982 and 1977—Con.—Con.

of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of

			19	77				
	Number of companies with		Total shipme interplant	ents, including transfers <sup>1</sup>	establish	s to other nments in company	Quantity	1982 product code
	shipments of \$100,000 or more	Quantity of production for all purposes	Quantity <sup>2</sup>	Value (million dollars)	Quantity	Value (million dollars)	produced and consumed in the same establishment	code
	(NA)	(X)	(X)	4400.3	(X)	(X)	(X)	23921 2211A pt 2221A pt
	(X) (NA)	(X) (X)	(X) (X)	(D) (D)	(X) (X)	(X) (X)	(X) (X)	2211A pt 2221A pt 23921
	(NA) (NA) (NA)	(X) (X) (X)	(4) (4) (4)	(4) (4) (4)	(X) (X) (X)	(×) (×) (×)	(X) (X) (X)	23921 12 2211A 42 23921 12 2211A 42
	(NA) (NA) (NA)	(X) (X) (X)	(4) (4) (4)	(4) (4) (4)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	23921 13 2221A 21 23921 13 2221A 21 23921 15
	(NA) (NA) (NA)	(X) (X)	(4) (4) (4)	(4) (4) (4)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	2221A 22 23921 15 2221A 22
	(NA) (NA) (NA)	(X) (X) (X)	(4) (4) (4)	(4) (4) (4)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	23921 17 2211A 43 23921 17 2211A 43
	(NA) (NA) (NA)	(X) (X) (X)	(4) (4) (4)	(4) (4) (4)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	23921 18 2221A 23 23921 18 2221A 23 23921 19
	(NA) (NA) (NA)	(X) (X) (X)	( <del>1</del> ) ( <del>1</del> ) ( <del>1</del> )	(4) (4) (4)	(X) (X)	(X) (X) (X)	(X) (X) (X)	2221A 24 23921 19 2221A 24
	(NA) (NA) (NA)	(X) (X) (X)	( <sup>4</sup> ) ( <sup>4</sup> ) ( <sup>4</sup> )	(4) (4) (4)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	23921 22 2211A 44 23921 22 2211A 44
	(NA) (NA) (NA)	(X) (X) (X)	(4) (4) (4)	(4) (4) (4)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	23921 23 2221A 25 23921 23 2221A 25 23921 25
	(NA) (NA) (NA)	(X) (X) (X)	(4) (4) (4)	(4) (4) (4)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	2221A 26 23921 25 2221A 26
	(NA) (NA) (NA)	(X) (X) (X)	(4) (4) (4)	(4) (4) (4)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	23921 27 2211A 46 23921 27 2211A 46
	(NA) (NA) (NA)	(X) (X) (X)	(4) (4) (4)	(4) (4) (4)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	23921 28 2221A 27 23921 28 2221A 27 23921 29
	(NA) (NA) (NA) (NA)	(X) (X) (X) (X)	(4) (4) (4) (X)	(4) (4) (4) 6.9	(X) (X) (X) (X)	XX XX XX XX	(X) (X) (X) (X)	2221A 28 23921 29 2221A 28 23921 00
	(NA)	(X)	(X)	5906.3	(X)	(X)	(X)	23922 00 2211A 25 22219 15 22219 25
	26	(X) (X)	(X) (X)	479.5	(X)	(X) (X)	(X) (X)	23922 00 2211A 25
}	9	(X)	(X)	426.8	(X)	(X)	(X)	22219 15 22219 25 5 23923 00
	(NA)	(X)	(X)	6693.0	(X)	(X)	(X)	23923 00 22119 00 2221A 33 2221A 37
1	(NA)	(X)	(X)	276.6	(X)	(X)	(X)	23923 00
	(NA)	(X)	(X)	416.4	(X)	(X)	(×)	2221A 33 2221A 37 23924 pt
	(NA)	(X) (X)	(D) (7)	(D)	(X)	(X)	(X)	2211A pt 2221A pt 22319 pt
	(NA)	(×) (×)	(D)	(7) (D)	(X) (X)	(X) (X)	(X) (X)	23924 pt 2211A pt 2221A pt 22319 pt

# Table 6a-2. Selected Products Primary to More Than One Industry—Quantity and Value of

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

					1982			
1982 product code	Product	Number of companies with	Overtity of	Total shipme interplant		Transfers establish the same	ments in	Quantity
		shipments of \$100,000 or more	Quantity of production for all purposes	Quantity <sup>2</sup>	Value (million dollars)	Quantity	Value (million dollars)	produced and consumed in the same establishment
	Made in weaving mills—Con. Woven blankets—Con.							
23924 82	Adult size mil doz	(NA)	(X)	2.4	124.2	(X)	(X)	(X)
2211A 62	Wholly or chiefly cottondo_	(NA)	(X)	.3	31.4	(X)	(X)	(X)
2211A 65 2211A 67 23924 82	Made from purchased fabric do	5	(X)	(D)	(D)	(X)	(X)	(X)
23924 62 2211A 62	Made in weaving mills:	_		(5)	(5)			(X)
2211A 65 2211A 67	Conventional type do Sheet type do Thermal do	2	(X) (X) (X)	(D) (D)	(D) (D)	XX X	(X) (X) (X)	$(\widetilde{x})$
23924 83	Wholly or chiefly manmade fiber fabric:	ŭ	(//	(=)	(2)	(7)	(**)	(,
2221A 41 2221A 42	100 percent spun fabric do	(NA)	(X)	(D)	(D)	(X)	(X)	(X)
2221A 43 23924 83	Made from purchased fabric do	1	(X)	(D)	(D)	(X)	(X)	(X)
2221A 41	Made in weaving miller	4		1.6	30.1			
2221A 42 2221A 43	Conventional type do_ Sheet type do_ Thermal do_	1	(X) (X) (X)	(D)	(D)	(X) (X) (X) (X)	(X) (X) (X)	(X) (X) (X)
23924 84 2221A 44	7		(//)	(=)	(5)	(7.)	(**)	(,,
2221A 45 2221A 46	100 percent filament fabric and combinations of spun and filament do		(X)		_	(X)	(X)	(X)
23924 84	Made from purchased fabric do		(X)	_	_	(X)	(X)	(x)
2221A 44	Made in weaving mills:		(X)	_				
2221A 45 2221A 46	Conventional type do	1	(X)	_	_	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)
23924 85 22319 25								
22319 27 22319 29	Wholly or chiefly wool fabric do	(NA)	(X)	(D)	(D)	(X)	(X)	(X)
23924 85	Made from purchased fabric do Made in weaving mills:	(NA)	(X)	(D)	(D)	(X)	(X)	(X)
22319 25 22319 27	Conventional type do_ Sheet type do_	8	(X)	(D)	(D)	(X)	(X)	(X)
22319 29	Thermal do Crib size do	1 (NA)	(X) (X) (X)	(D) 4.6	(D) 57.1	(X) (X) (X) (X)	888 8888	(X) (X) (X) (X)
23294 86 2211A 69	Wholly or chiefly cotton fabric do	(NA)	(X)	2.0	35.1	(X)	(X)	(X)
23924 86 2211A 69	Made from purchased fabric do Made in weaving mills do_	6 2	(X) (X) (X)	(D)	(D) (D)	(X) (X) (X)	(X) (X)	(X) (X) (X)
23924 87	Wholly or chiefly manmade fiber fabric do	(NA)		(D) (D)	(D)			
222 1A 47 23294 87	100 percent spun yarn fabric do_ Made from purchased fabric do_	(NA) 3	(X)	*.2 (D)	11.1 (D)	(X)	(X)	(X)
2221A 47 23924 88	Made in weaving mills do	6	(X) (X)	(D) (D)	(D)	(X) (X)	(X) (X)	(X) (X)
2221A 48	100 percent filament fabric and combinations of spun and filament do	(NA)	(X)	(D)	(D)	(X)	(X)	(20)
23924 88 2221A 48	Made from purchased fabric do Made in weaving mills do	2 1	(X) (X) (X)	(D) (D) (D)	(D) (D)	(X) (X) (X)	(X) (X)	(X) (X) (X)
23924 89 22319 31	Wholly or chiefly wool fabric do	(NA)	(X)	(D)	(D)	(X)	(X)	(X)
23924 89 22319 31	Made from purchased fabric do_ Made in weaving mills do_	- 1	(X) (X)	_ (D)	(D)	(X) (X)	(X) (X)	(X) (X)
2211A 75 2211A 71		i i	(, )	(-)	(-)		( )	( )
2211A 72 23924 11	- Quilted products, except bedspreads	(NA)	(X)	(X)	330.8	(X)	(X)	(X)
23924 13 23924 31		<b>( 7</b>	( ,	(.,		( 7	( )	` '
23924 39	Made in weaving mills:							
2211A 75	Wholly or chiefly cottonmillion_	3	(X)	(D)	(D)	(X)	(X)	(X)
2221A 71 2221A 72	100 percent filament do 100 percent filament do Made from purchased fabric:	2	(X) (X)	(D)	(D)	(X) (X)	(X) (X)	(X) (X)
	Comforter:		(,,,					
23924 11 23924 13	Bed comforters do Convertible sleeping bags do	40 4	(X) (X)	8.8 (S)	196.7 8.5	(X)	(X) (X)	(X) (X)
23924 31 23924 39	Mattress protectors do Other quilted products, including	16 18	(X) (X) (X)	(S) (S) (X)	79.7 23.4	(X) (X) (X) (X)	(X) (X) (X) (X)	(X) (X) (X) (X)
23990 26	Wadded quilts and baby rads:  Diapers, woven and knitted million	(NIA)						
2211A 37 23990 26	Made form purchased fabric do	(NA) 5	(X) (X)	(S) (D) (D)	42.5 (D) (D)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)
2211A 37	Made in a weaving mills do	1	(X)	(D)	(D)	(x)	(X)	(X)

¹Data reported by all producers, not just those with shipments of \$100,000 or more.
²For some establishments data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figures estimated in this manner equals or exceeds 10 percent of published figure \*10 to 19 percent estimated; \*\*20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).
³Excludes finished fabric, n.s.k.

<sup>\*</sup>Excludes finished fabric, n.s.k.

\*In 1977, bedspreads and bedsets made in weaving mills were included in product classes 22110, cotton; and 22210, manmade fiber; end those made from purchased fabric in product class 23926. Data for bedspreads and bedsets are included in the table total but could not be shown separately to avoid disclosing data of individual companies.

\*In 1977, sheets and pillowcases made in weaving mills were included in product class codes 22118, cotton; and 22219, manmade fiber; and those made from purchased fabric and product class code 23928. Also, 1977 product description for manmade fiber sheets and pillowcases made in weaving mills is not directly comparable to 1982 product class.

\*In 1977, towels and washcloths made in weaving mills were included in product class codes 22118, cotton; and 22219, manmade fiber; and those made from purchased fabric in product class code 23929. Also, 1977 product description for manmade fiber towels and washcloths is not directly comparable to 1982 product descriptions.

\*In 1977, data for blankets made from purchased fabric were not collected separately. Blankets made in weaving mills were included in product classes 22110, cotton; 22210, manmade fiber; and those made from purchased fabric in 23920. Furthermore, the product descriptions collected for 1977 are not directly comparable to the 1982 product descriptions.

\*For 1977, data for wool and chiefly wool blankets made in weaving mills were collected under product code 22319 23, bed and camp blankets, motor robe sets, including crib and reguler size. For 1982, product code 22319 23 was split out into product codes 22319 25, 22319 27, 22319 29, end 22319 31.

\*In 1977, data for wool and chiefly wool blankets made in weaving mills were collected under product code 22319 23. Data were included in product class 22110.

# Shipments by Industry: 1982 and 1977—Con.—Con.

of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of

			19	77				
	Number of companies with		Total shipme interplant	nts, including transfers1		s to other iments in company	Quantity	1982 product
	shipments of \$100,000 or more	Quantity of production for all purposes	Quantity <sup>2</sup>	Value (million dollars)	Quantity	Value (million dollars)	produced and consumed in the same establishment	code
	(NA)	(×)	(7)	(7)	(X)	(X)	(X)	F 0000 / 00
	(NA)	(X)	<b>(7)</b>	n	(X)	(X)	(X)	23924 82 2211A 62 2211A 65 2211A 67
	(NA)	(X)	(7)	(7)	(X)	(X)	(X)	23924 82
	(NA) (NA) (NA)	× × ×	(A)	ტ ტ	(X) (X) (X)	(X) (X) (X)	XX XX XX	2211A 62 2211A 65 2211A 67
	(NA)	(×)	(7)	(7)	(X)	(X)	(X)	23924 83 2221A 41 2221A 42 2221A 43
	(NA)	(X)	(7)	(7)	(X)	(X)	(X)	23924 83
	(NA) (NA) (NA)	(X) (X) (X)	000	000	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	2221A 41 2221A 42 2221A 43 23924 84 2221A 44
	(NA)	(X)	(7)	(7)	(X)	(X)	(×)	2221A 45 2221A 46
	(NA) (NA)	(X) (X)	(7) (7)	( <sup>7</sup> )	(X) (X)	(X) (X)	(X)	23924 84 2221A 44
	(NA) (NA)	(X) (X) (X)	(A)	(?) (?)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	2221A 44 2221A 45 2221A 46 23924 85
	(NA)	(X)	(7 8)	(7 8)	(X)	(×)	(X)	23924 85 22319 25 22319 27 22319 29
	(NA) (NA)	(X) (X)	( <sup>7 8</sup> ) ( <sup>8</sup> )	(7 8) (8)	(X) (X)	(X) (X)	(X) (X)	23924 85
	(NA) (NA) (NA)	(X) (X) (X) (X)	(e) (e) (e) (7)	(e) (e) (7)	XX XX XX XX	\$\$\$\$ \$\$\$\$	(X) (X) (X) (X) (X)	22319 27 22319 29
	(NA) (NA) (NA)	(X) (X) (X) (X)	(n) (n) (n) (n)	(7) (7) (7) (7)	(X) (X) (X)	(X) (X)	(X) (X) (X) (X)	23924 86 2211A 69 23924 86
	(NA)	(X) (X)	(7) (7)	(?) (?)	(X) (X)	(X) (X) (X) (X)	(X) (X)	2211A 69
	(NA) (NA)	(X) (X)	8	(A)	(X) (X)	(X)	(X) (X)	23924 87 23924 87 2221A 47 23924 88 2221A 48
	(NA) (NA) (NA)	(X) (X) (X)	(7) (7)	(A)	(X) (X) (X)	(X) (X) (X)	(X) (X)	23924 88 2221A 48
	(NA) (NA)	(X) (X) (X)	(7 8) (7) (8)	(7 s) (7) (8)	(X) (X) (X)	(X) (X) (X)	(X) (X) (X)	-[ 23924 89 22319 31 23924 89
	(NA)	(X)	(e)	(B)	(×)	(×)	(×)	22319 31
	(AN)	(×)	(X)	(°)	(×)	(X)	(%)	2211A 72 - 23924 11 23924 13 23924 31 23924 39
								2211A 75 2221A 71
	(NA)	(×)	(X)	(°)	(X)	(X)	(X)	2221A 72
			(,,)	(1)	(*/	(//	(//	23924 11 23924 13 23924 31 23924 39
1	(NA)	(X)	(X)	16.4	(X)	(X)		23990 26 2211A 37
F	5	(X)	(X)	16.4	(X)	(X)	(X)	_[ 23990 26 2211A 37

# Table 6a-3. Products—Quantity of Production by All Producers: 1982

[For meaning of abbreviations and symbols, see introductory text]

1982 product code	Product	Quantity of production (mil. sq. yd)	1982 product code	Product	Quantity of production (mil. sq. yd)
2211- —	Cotton broad woven fabric, gray:	(mii. sq. yu)		Blanketing and other napped fabric:	65.5
	Duck and ailled fabric, including combed duck:		22114 50	As reported in the census of manufactures	70.5
22111 00	As reported in the census of manufacturesAs reported in the Current Industrial Report, MQ-22T,	82.7	22114 52 22114 65	Broad Woven Fabric (Gray)  Blanketing, crib, thermal, and other  Canton flannels  All other napped fabric, except blanketing, including outing and interlining flannels	25.1 27.4
22111 11	Broad Woven Fabric (Gray) Plied warp ducks Army (plied filling only, including shelter tent and		22114 93		18.0
22111 31	woven stripe)	25.8 (D)	22115 00	Fine cotton fabric:  As reported in the census of manufactures  As reported in the Current Industrial Report, MO-22T.	(D)
22111 41	All other plied warp ducks, including filter twill, plied yarn chafer, numbered, narrow, sail, wide, etc	(D)	22115 41	Broad Woven Fabric (Gray)  Bed sheetings  All other combed and fine carded fabric	(D) (D)
22111 51	Single warp ducks	40.3	22115 43	Other broad woven cotton fabric and specialties:	170.6
22112 00	Sheeting and allied coarse and medium yarn fabric: As reported in the census of manufactures	518.7	22116 00	As reported in the census of manufactures As reported in the Current Industrial Report, MQ-22T,	348.0
22112 01	As reported in the Current Industrial Report, MQ-22T, Broad Woven Fabric (Gray) Osnaburgs, (single yarns clean, tinged, and part waste)	510.5	22116 23	Broad Woven Fabric (Gray).  Upholstery and tapestry fabric, including combed Corduroys	348.9 20.2 264.6
22112 01	all widths)	111.5	22116 33	Pinwales	84.0 112.9
22112 11	Sheetings	148.9 52.5	22116 35 22116 37 22116 45	Thicksets Widewales and other corduroys Velvets, velveteens, plushes, and other pile fabric,	11.8 55.9
22112 16	Class A and class B (average yarn numbers up to 21 s inclusive)Class C (average yarn numbers above 21's excluding	33.5	22110 40	including combedAll other cotton fabric more than 12 inches wide, including table damask cloths, covers, and napkins	16.8
22112 20	fine carded)	62.9	22116 71 22116 73	including table damask cloths, covers, and napkins JacquardsAll other	47.3 26.2 21.1
22112 32 22112 33	Drills	48.4	22110 /3	All Otter	21.1
22112 40 22112 53	Jeans Twills including three leaf and four leaf	15.9 72.5 58.1 7.6	22211 00	Manmade fiber and silk broad woven fabric, gray: 100 percent filament rayon and/or acetate fabric, including	
22112 61	Sateens (sheeting yarn) Less than 52 inches 52 inches or more	58.1 7.6 50.4		combinations chiefly rayon and/or acetate: As reported in the census of manufactures As reported in the Current Industrial Report MQ-22T,	(D)
22112 63 22112 67 22112 68	Bed sheeting (42 inches or more) muslin and carded	31.6		Broad Woven Fabric (Gray) 100 percent filament acetate and triacetate fabric	(D) 298.8
22112 98	percalesAll other sheeting yarn fabric including carded poplin, pillow and industrial tubing, dobby-type twills, and	(D)	22211 11 22211 13	Taffetas (plain weave)	208.7 (D) 82.7
	Bedfor cords	(D)	22211 19 22211 26	150 denier warp  All other plain weave taffetas  Twills, satins, and all other	(D) 90.1
22113 00	Print cloth yarn fabric: As reported in the census of manufactures	1 466.7	22211 50	Acetate or triacetate and other filament combinations, chiefly acetate or triacetate	(D)
22113 15	As reported in the Current Industrial Report, MQ-22T, Broad Woven Fabric (Gray). Plain print cloths (total threads per square inch 180 to 185).	1 518.1	22211 60	100 percent filament rayon fabric, including viscose and Bemberg process Rayon and other filament combinations, chiefly rayon	12.6 (D)
22113 30	Less than 42 inches	339.3 (D) 70.8	22212 00	100 percent filament fabric, except rayon and/or acetate: As reported in the census of manufactures	(D)
22113 33	42 inches, but less than 47 inches 47 inches, but less than 52 inches Less than 64 sley	70.8 (D) 65.5		As reported in the Current Industrial Report MQ-22T.	(D)
22113 34 22113 35	64 to 70 sley 71 to 79 sley	(D) (D) (D) (D)	22212 21 22212 41	Broad Woven Fabric (Gray)	419.2 198.5 195.0
22113 37 22113 41	More than 79 sley 52 inches or more	(D)	22212 47	All other 100 percent filament nylon weaves and	195,0
22113 65	Bandage cloth, all constructions (total threads per square inch 72 to 84)	43.5		weaves, twills, satins, sheers  100 percent filament polyester fabric  Textured yarn fabric  Less than 4 oz. per square yard	25.7 933.2
	Tobacco and cheese cloth (total threads per square inch 71 or less)	1 075.6	22212 54 22212 55	Less than 4 oz. per square yard  4 oz. or more per square yard	760.3 234.5 525.8
22113 72 22113 81 22113 89	All widths, 20x12, 18x14, or 18x12 Carded broadcloths All other print cloth yarn constructions, including window	(D) (D)	22212 56	Nontextured yarn fabric	172.9 (D)
	shade cloth, carded poplins, three leaf twills, and fancy print cloth	(D)	22212 57	Taffetas Marquisettes, ninons, and other sheers Industrial type	86.6 45.8
22114 —	Colored yarn fabric, toweling and dishcloth fabric, and napped fabric, including blanketing:		22212 59 22212 71	OtherPolyester and other filament combinations, chiefly	(D)
22114 10	Carded colored yarn fabric: As reported in the census of manufactures	(D)		polyester	(D) 357.5
	As reported in the Current Industrial Report, MQ-22T, Broad Woven Fabric (Gray) Denims, clothing, including sport denims	(D) 543.9	22212 72	upholstery, etc.	(¹) 35 <b>7</b> .5
22114 02 22114 07	10 oz. or less per square yard More than 10 oz. per square yard	68.9 475.0	22212 82 22212 85	Woven roving and screening Other industrial fabric Other 100 percent filament yarn fabric, including saran	21.6 1335.9
22114 18	All other carded colored yarn fabric, including chambray, etc.	(D)	22212 94	and olefin	(D)
22114 30	Toweling, washcloth, and dishcloth fabrics: As reported in the census of manufactures	462.3	22213 00	100 percent spun rayon and/or acetate fabric, including blends: As reported in the census of manufactures	94.2
	As reported in the Current Industrial Report, MC-22T, Broad Woven Fabric (Gray) Terry toweling, washcloth, bathmats, and dishcloth fabric, with cutmarks or borders	467.4		As reported in the Current Industrial Report MQ-22T, Broad Woven Fabric (Gray)	94.2
22114 33 22114 35	Terry toweling, washcloth, bathmats, and dishcloth fabric, with cutmarks or borders  Terry towelling and terry cloth, without cutmarks or	408.6	22213 13	100 percent spun rayon and/or acetate fabric, except	47.9 24.5
22114 39	borders, sold by the yard	21.6	22213 28	Twills and satins Other 100 percent spun rayon and or acetate fabric, including challis and linen type	23.5
	continous length toweling (other than terry)	37.1	l 22213 41	Spun rayon and or acetate blends, except blanketing !	46.1

# Table 6a-3. Products—Quantity of Production by All Producers: 1982—Con.

[For meaning of abbreviations and symbols, see introductory text]

1982 product code	Product	Quantity of production (mil. sq. yd)	1982 product code	Product	Quantity of production (mil. sq. yd)
	Manmade fiber and slik broad woven fabric, gray—Con.			Manmade fiber and sllk broad woven fabric, gray—Con.	
22214 00	100 percent spun polyester blends with cotton: As reported in the census of manufactures	3 928.0		Spun polyester fabric:	
	As reported in the Current Industrial Report MQ-22T,	0 320.0		100 percent spun polyester fabric, except blanketing	216.6
	Broad Woven Fabric (Gray)	3 946.7	22215 06	Print cloth yarn fabric	33.1
	Chiefly spun polyester blends with cotton only, except		22215 07	Other 100 percent spun polyester fabric, except	183.5
22214 13	blanketing: Batiste	214.1	22215 13	blanketingChiefly spun polyester blends with wool, except	103.5
22214 10	Bed sheeting	1 316.1	LLL 10 10	blanketing	(D)
22214 14	Combed	690.0		Chiefly spun polyester blends with rayon, except	
22214 16	Carded	626.1	22215 24	blanketing Plain print cloth, including broadcloth	513.6 317.4
			22215 23	Other print cloth yarn fabric	(D)
22214 17 22214 21	Combed broadcloth	182.6 (D)	22215 25	All other spun polyester/rayon fabric	(D)
22214 21	Corduroy Twills, including gabardine	478.6	22215 29	Chiefly spun polyester blends with other fibers, except	
22214 24	Less than 8 oz. per square yard	369.9		blanketing	(D)
22214 25	8 oz. per square yard or more	108.6	22215 32	Spun acrylic fabric, except blanketing, including	400
			22215 79	blends All other 100 percent spun yarn fabric and blends	10.9 16.3
	Oxfords	36.8	22216 00	Combinations of filament and spun yarn fabric, chiefly	10.0
22214 27	Shirting		222 16 00	manmade fiber:	
22214 28	ShirtingOther (including hopsacks, duck, etc.)	(D) (D)		As reported in the census of manufactures	889.6
				As reported in the Current Industrial Report MQ-22T,	
				Broad Woven Fabric (Gray) Combinations and mixtures of filament and spun yarn	853.3
22214 30 22214 34	PoplinsSateens	252.0 (D)		fabric (wholly or chiefly by weight of manmade fiber):	
22214 35	Voiles	(D)		Filament warp fabric with spun filling, chiefly mamnade	
		<b>\-</b> /		fibers by weight	381.3
			22216 12 22216 30	Filament rayon or acetate warp Filament polyester warp, except textured polyester	(D) 100.4
	Yarn dyed fabric	222.8	22216 31	l extured polyester warp	115.8
22214 31 22214 32	Plaids, ginghams, and checksShirtings, stripes, and chambray	(D) 95.4	22216 52	All other filament warp fabric, including nylon	(D)
22214 33	Denim	(D)		Spun warp fabric with filament filling, chiefly manmade	
22214 36	Other	(D) (D)		fibers by weight	(D)
			22216 77	Textured polyester filling	332.9
	Diet state fabric	953.9	22216 87	All other filament filling Combination filament and spun warp or filling	(D) (D)
	Print cloth fabricPrint cloth and carded broadcloth	953.9 880.0	22217	Blanketing, silk, paper, and other specialty fabric:	(5)
22214 41	Less than 71 sley	(D) 547.2	22211	As reported in the census of manufactures	257.6
22214 42	71 to 79 sley	547.2	22217 10	100 percent spun yarn fabric	92.9
22214 43 22214 45	More than 79 sley	(D) 73.9	22217 30	100 percent filament yarn fabric and combinations of	
222 14 45	All Other print clour	73.5		spun and filamentAs reported in the Current Industrial Report MQ-22T,	164.7
				Broad Woven Fabric (Gray)	261.6
	All other polyester/cotton fabric, including		22217 32	Blanketing, wholly or chiefly spun polyester	49.8
00014 54	seersucker	205.8	22217 41	Blanketing, wholly or chiefly spun acrylic and modacrylic	44.0
22214 51 22214 52	Less than 4 oz. per square yard4 oz. or more	88.3 117.6	22217 82	(includes woven and nonwoven type) Silk fabric	41.8 (D)
22215 00	All other 100 percent spun noncellulosic fabric:	117.0	22217 61	Upholstery and tapestry fabric	127.0
	As reported in the census of manufactures	949.9	22217 63	Velvets, plushes, and other pile fabric, except	
	As reported in the Current Industrial Report MQ-22T,	935.2	20017 77	upholstery	22.6
22215 55	Broad Woven Fabric (Gray) Spun nylon fabric, including blends	935.2	22217 77	All other specialty fabric, including tie, girdle, swimwear, and twisted paper yarn fabric	(D)
LLL 10 00	epair injust indire, including diolog access	34.3		and thicked paper yarr labile	(D)

122212 72 is included in 22212 85 to avoid disclosing data for individual companies.

Table 6a-4. Selected Products—Quantity of Production of Broad Woven Fabric Finished by All Producers: 1982

[Million square yards. For meaning of abbreviations and symbols, see introductory text]

[Million squ	are yards. For meaning of abbreviations and symbols, see introductory text)					
1982 product code	Product	Total finished fabric	Bleached and white finished	Dyed and finished	Printed and finished1	All other finished fabric
2261 22117	Finished cotton broad woven fabric:					
22617 22619 22117	As reported in the census of manufactures	2 692.0	1 273.2	897.2	464.0	57.6
	As reported in Current Industrial Report, MA-22S, Broad Woven Fabric Finished <sup>2</sup>	2 519.5	1 220.7	861.3	437.5	(X)
22617 12	Duck	66.6	22.4	33.3	10.8	(X)
22617 13	Sateens, twills, drills, jeans, and other twill-woven fabric	254.8	40.2	160.3	54.3	(X)
22617 21	Plain print cloth and/or carded broadcloths (yarns approximately 28's to 42's)	426.7	140.9	68.3	217.4	(X)
22617 <b>2</b> 4	Tobacco, cheese, and bandage cloth	578.1	(D)	(D)	-	(X)
22617 36	Toweling and dishcloth fabric	483.9	192.6	′274.7	16.6	(X)
22617 42	Corduroys	157.7	(D)	152.6	(D)	(X)
2 <b>2</b> 617 44	Flannels, blanketing, and other napped fabric	86.5	30.2	(D)	(D)	(X)
2 <b>2</b> 617 51	All other cottons (combed broadcloths, poplins, oxford, dimity, lawn, drapery, upholstery, velveteen, bedsheeting, and pillowcases (fabric, etc.)	465.2	<b>′217.</b> 9	143.9	103.4	(X)
2262 22218 22628 22629	Finished manmade fiber and silk broad woven fabric:  As reported in the census of manufactures	5 019.3	1 140.5	2 472.7	1 087.7	318.4
22218	As reported in the Current Industrial Report MA-22S, Broad Woven					
	Fabric Finished <sup>2</sup> Rayon and/or acetate and chiefly acetate:	4 598.8	1 088.2	2 479.8	1 030.8	(X)
22628 12 22628 14 22628 16	100 percent filament rayon and/or acetate 100 percent spun rayon and/or acetate Others, inlouding blends and mixtures of filament and spun yarns	237.7 65.1 28.7	12.5 8.0 1.7	'211.4 '48.7 '15.8	13.8 8.4 11.2	(X) (X) (X)
22628 <b>2</b> 3	Nylon and chiefly nylon	330.9	51.1	254.3	25.6	(X)
22628 31	Spun yarn fabric Filament yarn fabric: Nontextured yarn fabric:	150.3	11.0	′90.6	48.7	(X)
22628 33	Marquisettes, ninons, and other sheers	89.5	(D)	(D)	(D)	(X)
22628 35	Other nontextured filament yarn fabric (taffetas, duck, etc.) Textured yarn fabric:	9.9	(D)	(D)	(D)	(X)
22628 37	Lightweight, less than 4 oz. per square yard	92.4	(D)	50.7	(D)	(X)
22628 39	Heavyweight, 4 oz. or more per square yard	142.5	(D)	132.9	(D)	(X)
	Polyester/cotton blends, chiefly polyester	2 751.7	736.5	1 273.2	742.0	(X)
22628 40 22628 41	Print cloth and/or carded broadclothBatiste, broadcloth, shirting oxfords, voiles, and other lightweight	983.3	272.2	<sup>4</sup> 16.1	′295.0	(X)
	combed fabric Poplins, oxfords, twills, sateens, and other bottomweight fabric	371.2 403.4	151.0 72.5	191.4 309.7	′28.8 ′21.3	(X) (X)
22628 42 22628 43 22628 44 22628 45	Flannels and other napped fabric Bedsheeting, including filament/spun varn combinations	45.7 820.4	(D) (D)	23.9 246.3	(D) (D)	(X) (X) (X) (X) (X)
	All other polyester/cotton blends Polyester/rayon blends:	127.6	14.3	85.8	27.5	
22628 47 22628 48 22628 49	Print cloth and broadcloth Twills, poplins, and sateensAll other polyester/rayon blends	219.5 72.2 75.3	67.7 11.9 13.3	60.1 57.2 31.6	91.7 3.1 30.4	(X) (X) (X)
22628 52	Filament polyester, spun yarn combinations, chiefly polyester (including textured yarn fabric) All other fabric, including acrylic, saran, olefin, and glass fiber finished manmade fiber and silk broad woven fabric, n.s.k.	203.7	58.3	145.4	-	(X)
22628 54	finished manmade fiber and silk broad woven fabric, n.s.k.	129.5	70.1	48.8	10.6	(X)

¹Includes screen prints (hand and automatic), relief roller-printed fabric and block or stencil-printed fabric; excludes unit screen-printed towels, tablecloths, etc., flock, plisse, moired, or embossed goods.

²Excludes finished fabric not bleached, dyed, or printed at the reporting establishment (flameproofed, sanforized, mildew proofed, mercerized, embossed, flocked, moired, plisse, schreinerized, etc.) which were reported for 1982 as 77 million linear yards of cotton fabric, and 300 million linear yards of manmade fiber fabric.

Table 6a-5. Selected Products—Quantity and Value of Shipments by All Producers: 1982 and 1977

[Million square yards. For meaning of abbreviations and symbols, see introductory text]

			1982		1977			
1982 product	Product	Product shipments <sup>1</sup>				Product s	shipments1	
code		Quantity of production for all purposes	Quantity <sup>2</sup>	Value (million dollars)	Quantity of production for all purposes	Quantity <sup>2</sup>	Value (million dollars)	
2211A — 22219 — 23922 —	Sheets and pillowcases made from woven fabric:							
2211A 25 22219 15 22219 25 23922 00	As reported in the census of manufactures	(X)	(X)	1 156.3	(X)	(X)	906.3	
	As reported in the Current Industrial Report, MQ-23X, Sheets, Pillowcases, and Towels	(X)	(X)	1 151.7	30.9	31.2	878.6	
23922 04	Crib size sheets	.6	.7	20.9	.6	.7	13.0	
	Total sheets  By type:	14.8	14.7	884.6	16.3	16.6	661.0	
	Flat sheets	8.9	9.0	541.1	9.7	9.8	392.9	
	Fitted sheets	5.9	5.7	343.5	6.6	6.8	268.1	
23922 30	By fabric: Chiefly polyester blends with cottonAll other fabric	14.3 .6	14.1 .6	845.2 39.4	16.0 .3	16.3 .3	647.9 13.1	
	By size:							
23922 52	King	(×)	1.3	121.9	(X)	1.1	75.8	
23922 53	Queen	(X)	2.3	182.7	(X)	1.9	105.6	
23922 55	Full	(X)	5.2	296.3	(X)	6.8	263.9	
23922 57	Twin	(X)	5.7	269.2	(X)	6.5	205.1	
23922 59	Single and smaller	(X)	.3	14.5	(X)	.4	10.7	
23922 61	Sheet sets	(X)	1.7	237.8	(X)	(X)	(X)	
	Pillowcases	12.4	12.7	246.2	14.0	13.9	185.2	
	By fabric: Chiefly polyester blends with cotton All other fabric	11.9 .5	12.1 .6	234.5 11.7	13.7 .3	13.6 .3	180.7 4.5	
23922 80	Sheets and pillowcases, n.s.k.	(X)	(X)	(X)	(X)	(X)	19.4	
22119 2221A 23923	Towels and washcloths:							
22119 00 2221A 33 2221A 37 23923 00	As reported in the census of manufactures	(NA)	(X)	964.0	(X)	(X)	693.0	
	As reported in the Current Industrial Report, MQ-23X, Sheets, Pillowcases, and Towels	88.0	(X)	944.1	140.5	142.0	698.4	
	Finished terry towels	41.1	41.2	811.8	46.3	47.1	576.2	
23923 12	Sheared	15.2	14.5	305.5	15.3	15.5	238.0	
23923 13	Nonsheared	25.9	26.7	506.3	31.0	31.5	338.3	
	By end use:							
23923 14	Kitchen	5.1	5.2	43.0	4.7	5.1	23.0	
23923 15	Bath	19.2	19.2	515.2	21.2	21.5	355.1	
23923 16	Hand, face, guest, and fingertip	15.4	15.5	194.0	17.4	17.8	149.1	
23923 18	Bath/tub mats	.5	.5	18.7	1			
23923 19	All other types, including larger than bath (queen/king size bath towels, bath sheets, and beach towels)	.9	.9	40.9	2.9	2.6	49.0	
23923 24	Huck and crash towels	24.7	24.4	17.5	70.1	70.4	29.2	
23923 53	Terry washcloths	22.2	21.5	114.8	24.1	24.5	93.0	

¹Data reported by all producers, not just those with shipments of \$100,000 or more.
²For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: \* 10 to 19 percent estimated; \*\* 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

# Table 6b. Product Classes—Value of Shipments by All Producers for Specified States: 1982 and 1977

[Million dollars. Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in table 2. Also, product classes are not shown if they are miscellaneous or "not specified by type" classes. Statistics for some States are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 1982. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

class shipments or they disclose data for individual comp	anies in 1982. For		ions and symbols, see introductory text. For explanation of		
Product class and geographic area	1982 value of product shipments	1977 value of product shipments	Product class and geographic area	1982 value of product shipments	1977 value of product shipments
22111, COTTON DUCK AND ALLIED FABRICS			22213, 100 PERCENT SPUN RAYON, ACETATE FABRICS, INC. BLENDS		
United States	88.2	205.3	United States	80.6	184.3
Georgia	26.2	33.0	North Carolina	44.2	31.5
22112, COTTON SHEETING AND ALLIED			South Carolina	14.0	75.4
FABRICS	,		22214, 100 PERCENT SPUN POLYESTER		
United States	290.0	571.1	BLENDS WITH COTTON		
Alabama	38.6	135.1 230.1	United States	2 309.7	1 664.1
GeorgiaNorth Carolina	124.1 24.3	11.1	AlabamaGeorgia	199.4 321. <b>0</b>	149.8 123.1
South Carolina	88.2	163.4	North CarolinaSouth Carolina	335.3 1 347.5	325.8 1 013.3
22113, COTTON PRINT CLOTH YARN			Tennessee	11.3	(FF)
FABRICS			22215, ALL OTHER 100 PERCENT SPUN		
United States	296.2	344.7	NONCELLULOSIC FABRICS		
South Carolina	210.2	236.4	United States	650.6	404.0
22114, COTTON COLORED YARN FABRICS,			Alabama	64.2 16.9	(BB) 69.5
TOWELING AND DISHCLOTH FABRICS,			North CarolinaSouth Carolina	12 <b>6</b> .5 318.1	110.1 153.3
AND NAPPED COTTON FABRICS, INCLUDING BLANKETING			Virginia	76.0	(FF)
	926.6	758.7	22216, COMBINATIONS OF FILAMENT AND		
United States			SPUN YARN FABRICS, CHIEFLY MANMADE		
AlabamaGeorgia	91.5 232.0	88.1 160.4	FIBERS United States	614.7	461.5
North CarolinaSouth Carolina	367.9 114.0	(GG) 148.2	North Carolina	293.4	156.5
	114.0	140.2	Pennsylvania	19.8	49.0
22115, FINE COTTON GOODS (GRAY GOODS)			South CarolinaVirginia	145.1 45.7	102.2 34.1
	70.0	00.4	22217, BLANKETING, SILK, PAPER, AND		
United States	79.6	99.1	OTHER SPECIALTY MANMADE FIBER		
North CarolinaSouth Carolina	20.6 16.4	(NA) 33.9	FABRICS		
			United States	435.5	171.7
22116, OTHER BROAD WOVEN COTTON FABRICS AND SPECIALTIES			North CarolinaPennsylvania	167.1 58.4	98.1 (AA) (CC)
United States	385.6	636.2	Virginia	12.3	(CC)
	30.1		22218, FINISHED MANMADE FIBER AND SILK	1	
AlabamaGeorgia	40.2	(FF) 83.0	BROAD WOVEN FABRICS, FINISHED IN WEAVING MILLS		
North Carolina	229.4	297.7	United States	1 109.8	1 127.0
22117, FINISHED COTTON BROAD WOVEN			Georgia	125.7	170.2
FABRICS, FINISHED IN WEAVING MILLS, N.S.K.			Maine   North Carolina	45.4 317.3	(FF) 338.3
	70.47	000.4	South Carolina	318.1	200.8
United States	724.7	928.1	22313, FINISHED WOOL APPAREL FABRICS		
GeorgiaNorth Carolina	156.7 194.1	272.8 439.8	United States	501.4	299.3
			Maine	99.8 50.1	92.3 31.9
2211A, OTHER FABRICATED COTTON TEXTILE PRODUCTS (MADE IN WEAVING			MassachusettsNew Hampshire	46.0	(EE)
MILLS)			22411, WOVEN NARROW FABRICS		
United States	99.8	(NA)	United States	568.2	413.5
North Carolina	29.3	(NA)	Massachusetts	31.6	16.4
22211, 100 PERCENT FILAMENT RAYON			New HampshireNew Jersey	41.6 23.2	25.5 11.1
AND/OR ACETATE FABRICS			New YorkNorth Carolina	36.6 70.0	35.5 47.6
United States	280.5	265.7	Pennsylvania	60.8	39.0
North Carolina	79.5		Rhode IslandSouth Carolina	66.0 70.6	56.8 65.9
Pennsylvania	16.6	46.0	22414, BRAIDED NARROW FABRICS	70.0	00.5
Rhode Island Virginia	11.2 62.9	(BB) 69.0	United States	135.7	133.4
22212, 100 PERCENT FILAMENT FABRICS,			Massachusetts	8.5	12.3
EXCEPT RAYON, ACETATE			New York	3.6	3.0 14.4
United States	1 448.7	1 149.5	Pennsylvania	17.8	14.5
Georgia		208.9	Rhode IslandSouth Carolina	46.8	44.2 (EE)
New Hampshire	7.6	(BB)	22415, COVERED RUBBER THREAD		, , , ,
Pennsylvania	39.2	11.0		86.8	56.1
South Carolina Virginia				70.5	47.3

Note: For 1977, the following value ranges (in million dollars) substitute for actual figures withheld to avoid disclosing data for individual companies: AA—less than \$2.0 but not 0; BB—\$2.0 to \$4.9; CC—\$5.0 to \$9.9; EE—\$10.0 to \$19.9; FF—\$20.0 to \$49.9; GG—\$50.0 or more.

## Table 6c. Product Classes-Value Shipped by All Producers: 1982 and Earlier Years

[Million dollars. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

[INIIIOII C	dollars. To theating of abbreviations and symbols, see introductory text	. Tor oxpiana		от арренамог	,				
1982									
prod-									
uct	Product class								
code		1982	19811	19801	19791	19781	1977	1972	1967
		1002	1001	,000	1070	1070	1077	1072	1007
	Cathon board manner tabeles	3 635.0	4 778.4	4 876.2	4 518.1	3 834.5	4 132.0	2 525.8	2 756.5
2211-	Cotton broad woven fabrics	88.2	176.7	199.8	203.1	204.2	205.3	122.1	202.2
22111	Cotton duck and allied fabrics	290.0	691.1	658.5	614.7	580.2	571.1	531.6	655.7
22112	Cotton sheeting and allied fabrics	296.2	403.3	371.9	373.2	319.0	344.7	299.3	376.7
22113 22114	Cotton print cloth yarn fabricsCotton colored yarn fabrics, toweling and dishcloth fabrics, and	290.2	403.3	371.9	3/3.2	319.0	344.7	299.3	3/0./
22114	napped cotton fabrics, including blanketing	926.6	833.7	891.6	812.3	707.3	758.7	274.5	169.9
22115	Fine cotton goods (gray goods)	79.6	66.5	68.8	52.5	71.4	99.1	73.2	330.1
22116	Other broad woven cotton fabrics and specialties	385.6	623.2	745.4	715.9	611.8	636.2	329.7	243.5
22117	Finished cotton broad woven fabrics, finished in weaving mills	724.7	1 030.4	1 054.8	946.0	704.3	928.1	445.4	375.7
22119	Cotton towels and washcloths (made in weaving mills)	608.1	655.5	611.4	589.5	466.0	416.4	319.0	270.9
2211A	Other fabricated cotton textile products (made in weaving mills)	299.8	_				108.2	73.8	79.9
22110	Cotton broad woven fabrics and fabricated products, n.s.k.	136.2		<sup>2</sup> 273.9	<sup>2</sup> 210.8	<sup>2</sup> 170.3	64.2	57.2	51.9
22110	Cotton broad woven rabites and labiteated products, his.k.	100.2	_				L 04.2	57.2	31.3
2221-	Weaving mills, manmade fiber and silk	7 820.3	8 533 <b>.2</b>	7 554.7	7 018.1	6 378.0	5 981.5	3 520.0	2 178.5
22211	100 percent filament rayon and/or acetate fabrics	280.5	352.3	341.0	350.9	286.2	265.7	261.5	277.8
22212	100 percent filament fabrics, except rayon, acetate	1 448.7	1 439.1	1 251.8	1 226.9	1 277.6	1 149.5	514.3	292.5
22213	100 percent spun rayon, acetate fabrics, inc. blends	80.6	236.1	232.6	222.7	199.2	184.3	1 <b>8</b> 3.0	226.8
22214	100 percent spun polyester blends with cotton	2 309.7	2 400.8	2 227.0	1 971.1	1 777.3	1 664.1	1 004.6	502.0
22215	All other 100 percent spun noncellulosic fabrics	650.6	56 <b>6</b> .4	447.4	412.5	396.5	404.0	267.7	165.4
22216	Combinations of filament and spun yarn fabrics, chiefly manmade	04.47	700 4	00.47	540.5	400.4		070.0	
	fibers	614.7	766.4	604.7	548.5	483.4	461.5	279.3	195.0
22217	Blanketing, silk, paper, and other specialty manmade fiber fabrics	435.5	281.9	238.9	203.9	198.8	1 <b>7</b> 1.7	101.8	219.1
22218	Finished manmade fiber and silk broad woven fabrics, finished in	4 400 0	4 505 0	1 0050	4 040 5	1 215.5	4 407 0	504.0	270.4
00010	weaving mills Manmade fibers and silk sheets and pillowcases, made in weaving	1 109.8	1 565.8	1 335.0	1 318.5	1 215.5	1 127.0	581.0	270.4
22219		462.9	627.6	611.1	514.7	432.8	3426.8	000.4	/A1A\
00044	millsOther fabricated manmade fiber and silk textile products, made in	402.9	7 021.0	011.1	514.7	432.0	420.0	280.1	(NA)
2221A	Other rapricated manmade liber and slik textile products, made in	86.2							
22210	weaving mills (towels, washcloths, etc.) Manmade fiber and silk broad woven fabrics and fabricated	00.2	296.8	265.2	248.3	(S)	126.9	46.7	29.5
22210		341.2				• •			
	products, n.s.k.	341.2	_						
2231-	Wool broad woven fabrics	834.0	88 <b>5.</b> 5	<b>7</b> 3 <b>0.7</b>	684.5	652.4	581.3	440.7	898. <b>6</b>
22311	Finished wool yarn, tops or raw stock, not combed or spun at								
	same establishment	(D)	48.5	31.5	38.3	38.0	39.5	61.5	65.7
22312	Wool fabrics (gray goods)	137.8	130.9	96.6	95.3	105.0	97.3	31.4	137.3
22313	Finished wool apparel fabrics	501.4	513.3	420.4	388.3	353.1	299.3	213.5	533.6
22314	Finished wool nonapparel fabrics and felts	68.7	110.4	100.4	73.8	87.5	83.2	80.1	68.9
22315	Receipts for commission finishing or sponging of wool fabrics	(D)	38.5	34.6	33.1	37.0	26.8	26.7	44.8
22319	Wool or chiefly wool woven blankets (made in weaving mill)	24.5	14.0	12.8	10.4	(S)	9.2	13.0	17.5
22310	Woven wool fabrics and fabricated products, n.s.k.	44.3	29.9	34.4	45.4	(S)	26.0	14.5	28.8
2241-	Narrow fabrics mills	826.1	955.5	859.3	776.3	732.3	645.0	521.5	411.0
22411	Woven narrow fabrics	568.2	629.3	563.9	533.1	456.0	413.5	355.2	292.0
22414	Braided narrow fabrics	135.7	185.0	176.7	149.9	142.5	133.4	103.8	71.9
22415	Covered rubber thread	86.8	104.3	94.8	69.7	75.6	56.1	40.0	35.6
22410	Narrow fabrics, n.s.k.	35.4	36.9	23.9	23.6	(S)	42.0	22.5	11.5
					· · · · · · · · · · · · · · · · · · ·				

<sup>&</sup>lt;sup>1</sup>Figures are estimates derived from a representative sample of manufacturing establishments canvassed in annual survey of manufactures and, therefore, may differ from results that would be obtained from a complete canvass of all manufacturing establishments. Standard errors associated with estimates are published in annual survey of manufactures volumes for this period.

<sup>2</sup>In 1977, cotton sheets and pillowcases made in weaving mills were included in product class 22118. For 1982, these products are included in product class 2211A.

<sup>3</sup>1977 data for product class 22219 not comparable with data for prior years due to exclusion of bed and camp blankets, motor robes, etc.

# Table 7. Materials Consumed by Kind: 1982 and 1977

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1982		19	82	1977		
material code	Material	Quantity <sup>1</sup>	Delivered cost (million dollars)	Quantity <sup>1</sup>	Delivered cost (million dollars)	
	INDUSTRY 2211, WEAVING MILLS, COTTON					
	Materials, containers, and supplies	(X)	1 967.3	(X)	2 344.4	
013101 282305 282425 282413 282428 282301 282423 282411 282407 010014 228101	Raw cotton	2 213.4 1.3 132.9 (D) 10.5 (D) 82.6 *1.6 (D)	776.4 1.0 108.4 (D) 5.1 (D) 21.6 3.0 1.8 (D)	3 325.0 28.3 271.7 19.6 13.7 19.4 44.1 13.8 (S) 39.7	1 163.5 16.5 152.7 15.3 8.1 11.6 45.0 4.3 8.2 5.4	
280031 970099	transfers from other plants of the same company mil lin yd Dyes, lakes, and toners All other materials and components, parts, containers, and	**214.7 (X)	275.5 123.4	401.0 (X)	323.8 82.1	
971000	supplies	(X) (X)	244.9 116.8	(X)	255.5 50.7	

See footnotes at end of table.

# Table 7. Materials Consumed by Kind: 1982 and 1977—Con.

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

		19	82	1977		
1982 material code	Material	Quantity <sup>1</sup>	Delivered cost (million dollars)	Quantity <sup>1</sup>	Delivered cost (million dollars)	
	INDUSTRY 2221, WEAVING MILLS, MANMADE FIBER AND SILK					
	Materials, containers, and supplies	(X)	4 136.6	(X)	3 230.2	
013101	Raw cotton 1,000 bales_	1 057.6	427.1	1 202.4	430.6	
229931	Raw wool, mohair, and other animal fibers (scoured weight)mil lb_	1.1	2.2	22.7	43.7	
229933 282305	Wool tops do Rayon and acetate staple and tow do	125.4	101.5	138.0	88,	
282425	Polyester staple and tow do	722.9	569.9	654.1	370.2	
282413	Nylon staple and towdo	25.9 55.3	41.4 43.6	29.5 101.1	20.6 63.7	
282428 282301	All other manmade fiber staple and tow, except glass do Rayon and acetate filament yarns do	147.3	177.0	152.2	146.3	
282423	Polyester filament yarns do	419.0	406.7	396.7	341.	
282411 282407	Nylon filament yarns do All other manmade filament yarns, except glass do	*134.7 *106.2	210.3 84.2	103.1 49.5	143.9	
322935	Glass filament varn and roving	110.0	102.4	101.0	82.7	
10014	All other marinade litarieri yarris, except glass	(S)	8.7	45.7	26.7	
228101	Purchased spun yarn, all fibers, including transfers from other plants of the same companydo Purchased broad woven fabrics (piece goods), including	(S)	586.8	659.0	688.0	
220211	Purchased broad woven fabrics (piece goods), including transfers from other plants of the same company mil lin yd_	**550.5	352.3	236.9	214.8	
280031	Dyes, lakes, and toners	(X)	61.9	(X)	70.9	
970099	All other materials and components, parts, containers, and supplies	(X)	678.7	(X)	395.9	
971000	Materials, containers, and supplies, n.s.k. <sup>2</sup>	(X)	281.9	(X)	43.4	
	INDUSTRY 2231, WEAVING AND FINISHING MILLS, WOOL  Materials, containers, and supplies	( <b>x</b> )	312.6	( <b>x</b> )	225.0	
229931	Raw wool, mohair, and other animal					
	fibers (scoured weight)mil lb_	55.3	107.2	67.3	103.9	
229933 282305	Wool tops do	12.2 (D)	40.5 (D)	*3.5 (D)	8.8 (D	
282425	Rayon and acetate staple and tow do Polyester staple and tow do	6.1	4.3	*8.8	6.6	
282413 282428	Nylon staple and tow do	5.0 2.5	7.2 2.8	*9.5 3.4	(D 6.0 7.9 3.7	
010014	All other fibers (silk, jute, reused wool, waste, etc.)	3.6	3.9	(S)	9.3	
282301	All other fibers (silk, jute, reused wool, waste, etc.) do  Rayon and acetate filament yarns do			ון יי		
282423 282411	Polyester filament yarnsdo	(D) (D)	(D) (D)	2.6	1.7	
282407	All other filament varns, except glass do	1 00	(B)			
228101	Nylon filament yarns do_ All other filament yarns, except glass do_ Purchased spun yarn, all fibers, including transfers from other plants of the same company do_	13.2	52.2	*10.5	21.3	
220211	plants of the same company do_ Purchased broad woven fabrics (piece goods), including transfers from other plants of the same company mil lin yd_	*6.9	8.7			
280031	Dyes, lakes, and toners		19.3	(D) (X)	(D) 11.2	
970099	All other material and components parts containers and		60.4		19.7	
074000	supplies	(X)	36.4 26.0	(X)	15.5	
971000						
971000	Industry 2241, NARROW FABRIC MILLS					

<sup>&</sup>lt;sup>1</sup>For some establishments, data have been estimated from central unit values which are based on quantity-cost relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: \* 10 to 19 percent estimated; \*\* 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

<sup>2</sup>Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form.

# APPENDIX A. Explanation of Terms

This appendix is in two sections. Section 1 includes items which were requested of all establishments that were mailed census of manufactures forms including annual survey of manufactures (ASM) forms. Note that this section also includes several items (number of establishments and companies, value added, classes of products, and specialization and coverage ratios) that were not included on the report forms but were derived from information collected on the forms. Section 2 covers supplementary items that were requested only from establishments included in the ASM sample. Results of the supplementary ASM inquiries are included in tables 3c and 3d of this report.

# SECTION 1. ITEMS COLLECTED OR DERIVED BASED ON ALL CENSUS OF MANUFACTURES (INCLUDING ASM) REPORT FORMS

Number of establishments and companies—As discussed in the Introduction, a separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operates at different physical locations, even if the individual locations are producing the same line of goods, a separate report was requested for each location. If the company operates in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on the number of custodial employees, capital expenditures, inventories, or any shipments from inventories during the portion of the year the plant was in operation.

In this report, data are shown for establishments in operation at any time during the year. A comparison with the number of establishments in operation at the end of the year will be provided in the Introduction to Part 1 of the General Summary subject report.

**Employment and related items**—The regular report forms requested separate information on production workers as of a payroll period for each quarter of the year and on other employees as of the payroll period which included the 12th of March.

All employees—This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period ending nearest the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

Production workers—This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All other employees—This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office function, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment who are engaged in the construction of major additions or alterations to the plant and who are utilized as a separate work force.

In addition to reports sent to operating manufacturing establishments, information on employment during the payroll period which included March 12 and annual payrolls was also requested of auxiliary units (e.g., administrative offices, warehouses, and research and development laboratories) of multiestablishment companies. However, these figures are not included in the totals for individual industries shown in this report. They are included in the general summary and geographic area reports and in the final bound volumes as a separate category.

Payrolls—This item includes the gross earnings of all employees on the payroll of operating manufacturing establishments paid in the calendar year 1982. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers

of corporations, but excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payroll of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' supplemental labor costs, both those required by Federal and State laws and those incurred voluntarily or as part of collective bargaining agreements. (Supplemental labor costs are explained later in this appendix.)

As in the case of employment figures, the payrolls of separate auxiliary units of multiestablishment companies are not included in the totals for individual industries or industry groups.

**Production-worker** hours—This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

Cost of materials—This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

The important components of this cost item are (1) all raw materials, semifinished goods, parts, components, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year, (2) electric energy purchased, (3) fuels consumed for heat, power, or the generation of electricity, (4) work done by others on materials or parts furnished by manufacturing establishments (contract work), and (5) products bought and resold in the same condition. (See discussion of duplication of data below.)

Specific materials consumed - In addition to the total cost of materials, which every establishment was required to report, information was also collected for most manufacturing industries on the consumption of major materials used in manufacturing. The inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. Information on the specific materials consumed is shown in table 7 if appropriate to the industry. Establishments consuming less than a specified amount (usually \$10,000) of a specific material were not requested to report consumption of that material separately. Also, the cost of materials for the small establishments for which either administrative records or short forms were used was imputed as "not specified by kind." (See the Introduction for the importance of administrative records in the industry.)

Value of shipments—†his item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and resold without further

processing. Included are all items made by or for the establishments from materials owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of "all other costs" (including company overhead) and profit. (See discussion of duplication of data below.)

Individual products—As in previous censuses, data were collected for almost all industries on the quantity and value of individual products shipped. In the 1982 census program, information was collected on the output of approximately 11,000 individual product items. The term "product," as used in the census of manufactures, represents the finest level of detail for which output information was requested. Consequently, it is not necessarily synonymous with the term "product" as used in the marketing sense. In some cases it may be much more detailed and, in other cases, it is more aggregative. For example, "pharmaceutical preparations" was distributed into over 100 items; whereas, "motor gasoline" was reported as a single item.

Approximately 6,000 of the product items were listed separately on the 1982 census report forms. Data for about 5,000 products were obtained in the monthly, quarterly, or annual surveys comprising the Current Industrial Reports series of the Census Bureau. Totals for the year 1982 for these items, as derived from the commodity surveys, are shown in the "products shipped" table (table 6a) together with the tieline total value collected in the census for reconciliation purposes.

The list of products for which separate information was collected was prepared after consultation with industry and government representatives. Comparability with previous figures was given considerable weight in the selection of product categories so that comparable 1977 information is presented for most products.

Typically, both quantity and value of shipments information was collected. However, if quantity was not significant or could not be reported by manufacturers, only value of shipments was collected.

Shipments include both commercial shipments and transfers of products to other plants of the same company. For industries in which a considerable portion of the total shipments is transferred to other plants of the same company, separate information on interplant transfers was also collected. Moreover, for products that are used to a large degree within the same establishment as materials or components in the fabrication of other products, total production and often consumption of the item within the plant was collected. Typically, the information on production was also collected for products for which there are significant differences between total production and shipments in a given year because of wide fluctuations in finished goods inventories. Other measures of output of products with long production cycles were used as appropriate and feasible.

Classes of products—To summarize the product information, the separate products were aggregated into classes of products that, in turn, were grouped into all primary products of each industry. The code structure used is a seven-digit number for the

individual product, a five-digit number for the class of product, and a four-digit number for the total primary products in an industry. (See Introduction, Industry Classification of Establishments, for application of the coding structure to the assignment of SIC codes for establishments.)

In the 1982 census, the 11,000 products were grouped into approximately 1,500 separate classes on the basis of general similarity of manufacturing processes, types of materials used, and the like. However, the grouping of products was affected by the economic significance of the class and, in some cases, dissimilar products were grouped because the products were not sufficiently significant to warrant separate classes.

Duplication in cost of materials and value of shipments - The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication, since the products of some industries are used as materials by others. With some important exceptions, such as for motor vehicles and parts, this duplication is not significant at the four-digit industry level. However, it is significant at the two-digit and three-digit industry group level because these totals often include industries that represent successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the "Food" group and the addition of pulp mills to paper mills in the "Paper and Allied Products" group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the census of manufactures.

Value added by manufacture—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

Because of the change in instructions for reporting inventories for 1982, the 1982 figure for value added is not strictly comparable to prior-year data. This is explained more fully in the inventories section below.

"Value added" avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

New and used capital expenditures—For establishments in operation and establishments under construction but not yet in operation, manufacturers were asked to report their new expenditures for (1) permanent additions and major alterations to manufacturing establishments, and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

The totals for new expenditures exclude that portion of expenditures leased from nonmanufacturing concerns, new facilities owned by the Federal Government but operated under contract by private companies, and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Also excluded are expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expenses.

Manufacturers were also requested to report the value of all used buildings and equipment purchased during the year at the purchase price. For any equipment or structure transferred to the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. Furthermore, if the establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported under used capital expenditures.

Total expenditures for used plant and equipment is a universe figure; i.e., it is collected on all census forms. However, the breakdown of this figure between expenditures for used buildings and other structures and expenditures for used machinery and equipment is collected only on the ASM form and is subject to sampling error (see table 3d). The data for total new capital expenditures, new building expenditures, and new machinery expenditures, as well as the data for total used expenditures, are shown in both tables 3a and 3d. The figure in table 3a is a census universe total and may differ from the results of the ASM sample shown in table 3d. Since the figures in table 3d are subject to sampling error, they are not considered as reliable as the universe figures.

End-of-year inventories — Respondents were asked to report their 1981 and 1982 end-of-year inventories at cost or market. Effective with the 1982 Economic Censuses, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). In 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Because of this change in reporting instructions, the 1982 data for inventories and value added by manufacture included in the tables of this report are not comparable to the prior-year data shown in table 1a of this report and in historical census of manufactures and annual survey of manufactures publications. Inventories and value added data estimated on a basis comparable to the historical data, using the reported information for 1982, are shown in footnote 4 of table 1a. However, the end-of-1981 figure shown in this footnote may differ from the corresponding value published as part of the 1981 Annual Survey of Manufactures.

This difference at the four-digit SIC level is due primarily to the effects of industry shifts. As described in the Industry Classification of Establishments section of the Introduction, ASM noncertainty plants are allowed to shift from one industry to another in a census year; whereas, they are "frozen" in a particular industry in ASM years. Other explanations for this difference include the effects of sampling and processing errors and revisions to end-of-1981 data reported by respondents.

In using inventory data by stage of fabrication for "all industries" and at the two-digit industry level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by another establishment in a different industry. For example, the finishedproduct inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for individual industries, industry groups, and "all manufacturing," which are aggregates of figures reported by establishments in specified industries.

Specialization and coverage ratios—These items are not collected on the report forms but are derived from the data shown in table 5b. An establishment is classified in a particular industry if its shipments of primary products of that industry exceed in value its shipments of the products of any other single industry.

As noted in the Introduction, an establishment's shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary

products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.). Specialization and coverage ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in tables 1a through 5a and data on product shipments shown in tables 6a through 6c.

Specialization ratio represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

Coverage ratio represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments wherever classified.

### SECTION 2. ITEMS COLLECTED ONLY ON ASM REPORT FORMS

Supplemental labor costs-Supplemental labor costs are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees. While the excluded items do benefit employees and all or part of their cost generally is similar to the items covered in the ASM labor costs statistics, accounting records do not generally provide reliable figures on net employee benefits of these types.

Cost of purchased services - ASM establishments were requested to provide information on the cost of purchased services for the repair of buildings and other structures, the repair of machinery, and communication services. Included in the cost of purchased services for the repair of buildings and machinery are payments made for all maintenance and repair work on buildings and equipment, such as painting, roof repairs, replacing parts, and overhauling equipment. Such payments made to other establishments of the same company and for repair and maintenance of any leased property are also included. Extensive repairs or reconstruction that were capitalized are considered capital expenditures for used buildings and machinery and are, therefore, excluded from this item. Repair and maintenance costs provided by an owner as part of a rental contract or incurred directly by an establishment in using its own work force are also excluded.

The response coverage ratio shown in table 3d for each of the three types of purchased services listed above is a measure of the extent to which respondents reported for each item. It is derived for each item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight; see section 3) for those ASM establishments that reported the

specific inquiry to the weighted total employment for all ASM establishments classified in the industry.

Electric energy used for heat and power—Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy and quantity of generated-less-sold electric energy were collected only on the ASM forms. The cost and quantity of purchased electric energy represent the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

Beginning- and end-of-year depreciable assets — The data encompass all fixed depreciable assets on the books of establishments at the beginning and at the end of the year. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are non-depreciable capital assets, including inventories and intangible assets, such as patent rights and royalties. Also excluded are land and depletable assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year, rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress. In addition, respondents were requested to make certain that assets at the beginning of the year plus new and used capital expenditures, less retirements, equalled assets at the end of the year.

New and used capital expenditures—The data for total new capital expenditures, new building expenditures, new machinery expenditures, and total used capital expenditures are collected on all census forms. However, the breakdown between expenditures for used buildings and other structures and expenditures for used machinery and equipment is collected only on the ASM form. (See further explanation on capital expenditures in section 1.)

Breakdown of new capital expenditures for machinery and equipment—ASM establishments were requested to separate their capital expenditures for new machinery and equipment into (1) automobiles, trucks, etc., for highway use, (2) computers and peripheral data processing equipment, and (3) all other.

The category "automobiles, trucks, etc., for highway use" is intended to measure expenditures for vehicles designed for highway use that were acquired through a purchase or lease-purchase agreement. Vehicles normally operating off public highways (vehicles specifically designed to transport materials, property, or equipment on mining, construction, logging, and petroleum development projects) are excluded from this item.

The "not specified by kind" or n.s.k. item for expenditures for new machinery and buildings, shown in table 3d, represents the total machinery and equipment expenditures for establishments that did not break down their expenditures for the three specific categories. This means that for most industries the specific categories are understated.

Retirements—Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during 1982. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent was also requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

Rental payments—This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets, and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company, and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

**Depreciation charges**—This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.



# APPENDIX B.

# Annual Survey of Manufactures (ASM) Sampling and Estimating Methodologies

#### **DESCRIPTION OF SURVEY SAMPLE**

The Annual Survey of Manufactures (ASM) contains two components. The mail portion of the survey is a probability sample of about 55,000 manufacturing establishments selected from a total of about 225,000 establishments. These 225,000 establishments represent all manufacturing establishments of multiunit companies and all single-unit manufacturing establishments with five employees or more tabulated in the 1977 Census of Manufactures. This mail portion is supplemented by a Social Security Administration list of new manufacturing establishments opened after 1977. The individual establishments were defined as the sampling unit for this sample. This is a change from the previous ASM sample when companies were used as the sampling unit. The implication of this change is that the probability of selection of any establishment relates only to the size of the establishment itself and is independent of the size of the company with which the establishment is affiliated. The efficiencies associated with the change to an establishment sample have made it possible to reduce the mail sample panel from 70,000 establishments in 1978 to 55,000 establishments in the

The nonmail portion of the survey includes all single-unit establishments that were tabulated with less than five employees in the 1977 Census of Manufactures. Although this portion contained approximately 125,000 establishments, it accounted for less than 2 percent of the estimate for total value of shipments at the total manufacturing level. This portion was not sampled; rather, the data for every establishment in this group were estimated based on selected information obtained annually from the administrative records of other Federal agencies. This administrative record information, which includes payroll, total employment, industry classification, and physical location of the establishment, was obtained under special conditions, which safeguard the confidentiality of both tax and census records. Estimates for data for these small establishments were developed using industry averages in conjunction with the administrative information.

The corresponding estimates for the mail and nonmail establishments were added together, along with the adjusted base-year differences as defined in Description of Estimating Procedures below. The remaining description of the survey sample relates only to the mail portion of the ASM sample.

All establishments with 250 employees or more in the 1977 census were included in the survey panel with certainty. These establishments collectively account for approximately 65 percent of the total value of shipments for manufacturing establishments in the 1977 census. Smaller establishments were sampled with probabilities ranging from 1.000 down to 0.005 in accordance with mathematical theory for optimum allocation of a sample.

The probabilities of selection assigned to the smaller establishments were proportional to measures of size determined for each establishment. For establishments included in the 1977 Census of Manufactures, the measure of size depended directly upon each establishment's 1977 product class values and the

historic variability of the year-to-year shipments of each product class. Roughly equivalent measures of size were assigned to postcensus birth establishments based on their industry codes and anticipated payroll and employment.

The method of assigning measures of size was used in order to maximize the precision (that is, minimize the variance of estimates of the year-to-year change) in the value of product class shipments. Implicitly, it also gave weight to differences in employment, value added, and other general statistics, for these are highly correlated with value of shipments. Individual sample selection probabilities were obtained by multiplying each establishment's final measure of size by an overall sampling fraction coefficient calculated to yield a total expected sample size.

The sample selection procedure gave each establishment in the sampling frame an independent chance of selection. This method of independent selection permits the rotation of establishments into and out of a given sample panel without introducing a bias into the survey estimates.

#### **DESCRIPTION OF ESTIMATING PROCEDURES**

Most of the ASM estimates for the years 1978-1981 were computed using a modified ''difference estimate'' formula. For each item, a base-year difference was developed. This base-year difference is equal to the difference between the 1977 census published number for an item total and the linear ASM estimate of the total for 1977. The ASM linear estimate was obtained by multiplying each sample establishment's data by its sample weight (the reciprocal of its probability of selection) and summing the weighted values.

This base-year difference was then adjusted to reflect the estimated growth at the four-digit or, in the case of product classes, five-digit based Standard Industrial Classification (SIC) level from 1977 to the year of the survey; for example, 1981. It should be noted that due to processing constraints, the growth factors lagged one year; i.e., if 1981 is the survey year, they were not based on the estimated growth from 1977 to 1981 but rather the growth from 1977 to 1980. This one-year lag had negligible effect on the estimates, particularly at the total manufacturing level where the adjusted base-year difference accounted for less than 1 percent of the estimate for total value of shipments.

These adjusted base-year differences were then added to the corresponding current-year linear estimates, which include the sum of the estimates for the mail and nonmail establishments, to produce the estimates for the years 1978-1981. Estimates developed by this procedure usually are far more reliable than comparable linear estimates developed from the current sample data alone.

The 1982 sample data included in table 3d were also developed using difference estimates. However, since the universe totals for the census year (1977 or 1982) were not known, a modification of the procedure described above was necessary. For each item in table 3d, except purchased services and breakdown of expenditures for new machinery and equipment (see further description in appendix A, section 2), linear

estimates of the publication totals from the ASM mail sample were adjusted by the difference between imputed census totals and the corresponding ASM mail sample estimates of these imputed totals. These imputed totals are obtained by applying industry average ratios to control item values at the establishment level. For example, an imputed total beginning assets figure is obtained by multiplying each establishment's total value of shipments by the industry (four-digit SIC) average for the ratio of beginning assets to shipments.

Separate estimates for the nonmail establishments were not developed. However, their contribution to the publication estimates is reflected in the difference adjustment.

The method of inventory valuation percentages included in table 3c was developed using both complete census information and ASM estimates. The percentages for the four major categories (LIFO, non-LIFO, valuation method not reported, and LIFO reported without associated value and reserve) were derived from the complete census and correspond to the values included in table 3d. The percentages for the specific non-LIFO methods of valuations (FIFO, average cost, specific costs, etc.) are ratio estimates developed from the ASM in conjunction with the census universe estimate for the total of the non-LIFO methods.

#### QUALIFICATIONS OF THE DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sampled lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the differences between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of the estimates.

The particular sample selected for the ASM is one of a large number of similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretical, comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected statistics in this report. Except for table 3c, they are presented in the form of relative standard errors, the standard errors divided by the estimated values to which they refer. In table 3c, "absolute" standard errors of the estimates are presented.

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples).

The complete coverage value would be included in the range:

 From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.

- From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.
- 3. From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown as 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total and about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors would also occur if a complete canvass were to be conducted under the same conditions as the survey.

Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected in the course of the Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or only moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown.

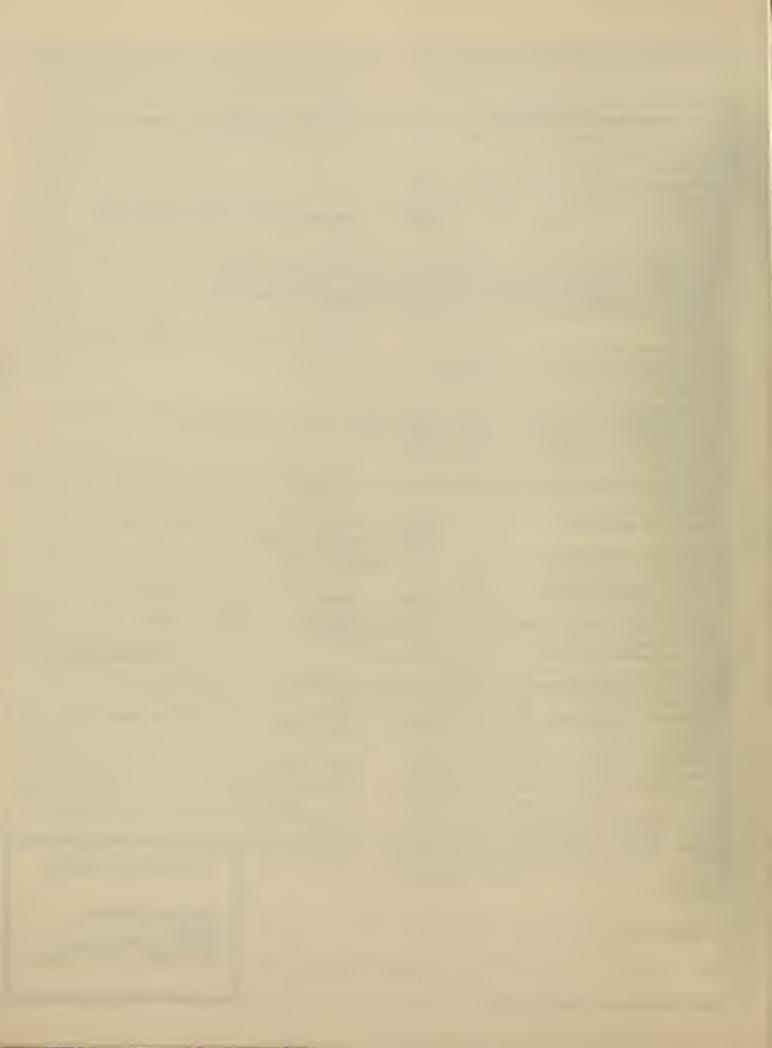
The concept of complete coverage under the conditions prevailing for the ASM is not identical to the complete coverage of the census of manufactures, as the censuses have been conducted. Nearly all types of operational errors that affect the ASM also occur in the censuses. The ASM and the censuses, are conducted under quite different conditions, and operational errors can be better controlled in the ASM than in the censuses. As a result, for many of the census figures, the errors are of the same order of size as the total errors of the corresponding annual survey estimates. The differences between the census and ASM operating conditions also disturb, to some degree, the comparability of the ASM and census data.

Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be of limited reliability. However, the figure may be combined with higher-level totals, creating a broader aggregate, which then may be of acceptable reliability.

# FAR HFRF

# REFERENCE MATERIALS • ORDER FORMS • PUBLICATION CORRECTIONS

	Please send me the items marked (X	X) below.									
	$\square$ Corrections (if there are any) for	this publ	lication—	Manufactures, Wea	aving Mills, MC82-I-22A						
	If you purchase several different reports from the 1982 Economic Censuses, you should complete this form from each of the reports and return it to the address shown below to receive publication corrections. However, you should complete the following on <b>only</b> one of the forms.										
	Guide to the 1982 Economic Censuses and Related Statistics										
	Monthly Product Announcement—A monthly notice of all products released by the Census Bureau during the previous month—useful primarily to persons who plan to purchase publications, tapes, etc., in the future.										
	Publication announcements and ord	der forms	– Mark (	'X) subjects in whic	:h you are interested.						
	Retail Trade		Economic Censuses of Outlying Areas (Puerto Rico,		Governments						
	☐ Wholesale Trade	Gua	am, Virgir	n Islands, and ariana Islands)	Foreign Trade						
	Service Industries	☐ Ent	erprise St	tatistics	☐ Population						
	Construction Industries	☐ Min Ow	nority- and ned Busi	d Women- nesses	☐ Housing						
	☐ Manufacturing		riculture		☐ International Statistics						
	☐ Mineral Industries	☐ Cou	unty Busi	ness Patterns	Geography						
	☐ Transportation	☐ Qua	arterly Fir	nancial Report	☐ Guides, Catalogs, etc.						
Name					Mail completed form to						
	ss/PO Box				Customer Services DUSD						
City		Is	State	ZIP Code	Bureau of the Census Washington, D.C. 20233						
City			tate	ZIF Code							



# **PUBLICATION PROGRAM**

#### 1982 CENSUS OF MANUFACTURES

Publications of the 1982 Census of Manufactures, containing preliminary and final data on manufacturing establishments in the United States, are described below. Publication order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233

#### **Preliminary Reports**

Preliminary industry data are issued in 443 separate reports covering 452 industries (or combinations of industries). Preliminary data for States are grouped and released in reports for each of the nine census geographic divisions.

#### **Final Reports**

Final detailed statistics are issued in separate paperbound reports.

#### Industry series-82 reports (MC82-I-20A to -39D)

Each of the 82 reports provides information for a group of related industries (e.g., "dairy products" includes industries for butter, cheese, milk, etc.). Final figures for the United States are shown for each of the 452 manufacturing industries on quantity and value of products shipped and materials consumed, cost of fuels and electric energy, capital expenditures, assets, rents, inventories, employment, payroll, payroll supplements, hours worked, value added by manufacture, number of establishments, and number of companies. Comparative statistics for earlier years are provided where available.

For each industry, data on value of shipments, value added by manufacture, capital expenditures, employment, and payroll are shown by employment-size class of establishment and degree of primary product specialization. Statistics are given on production of specific products and consumption of energy and various materials by industry.

#### Geographic area series-51 reports (MC82-A-1 to -51)

A separate report for each State and the District of Columbia presents data for industry groups and industries on value of shipments, cost of materials, value added by manufacture, employment, payroll, hours worked, new capital expenditures, and number of manufacturing establishments for the State, SMSA's, and large industrial counties and places. Comparative statistics for earlier census years are shown for the State and large SMSA's. Manufacturing totals are presented for each county and for places with significant manufacturing activity. Detailed statistics—including inventories, assets, rents, and energy costs—are presented only in statewide totals.

#### Subject series-10 reports (MC82-S-1 to -10)

Each of the 10 reports contains detailed statistics for an individual subject, such as: selected materials consumed, selected metalworking

operations, manufacturing activity in government establishments, concentration ratios in manufacturing, type of organization, water use in manufacturing, fuels and electric energy consumed (separate publications for industry statistics, and State and SMSA statistics), textile machinery in place, production indexes, and a general National-level summary.

#### **Final Report Volumes**

Final paperbound reports subsequently are assembled and reissued in clothbound volumes.

- Volume I. Summary and Subject Statistics—data previously issued in series MC82-S.
- Volume II. Industry Statistics—data previously issued in series MC82-1.

Part 1. Major Groups 20 to 26

Part 2. Major Groups 27 to 34

Part 3. Major Groups 35 to 39

 Volume III. Geographic Area Statistics—data previously issued in series MC82-A.

Part 1. Alabama to Montana

Part 2. Nebraska to Wyoming

#### Microfiche

All published data also are available on microfiche.

### **Computer Tapes**

Selected data—generally detailed information by industry and/or geographic area—also are available on public-use computer tapes. For the selected data, these tapes will provide the same information found in the final reports. Public-use computer tapes are available for users who wish to summarize, rearrange, or process large amounts of data. These tapes, with corresponding technical documentation, are sold by Data User Services Division, Customer Services (Tapes), Bureau of the Census, Washington, D.C. 20233.

#### OTHER ECONOMIC CENSUSES REPORTS

Data on retail trade, wholesale trade, service industries, construction industries, mineral industries, enterprise statistics, minority-owned businesses, women-owned businesses, and transportation also are issued as part of the 1982 Economic Censuses. A separate series of reports covers the censuses of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Northern Mariana Islands. All published reports and microfiche are sold by the Superintendent of Documents, U. S. Government Printing Office. Appropriate announcements and order forms describing these products are available free of charge from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

